




3 1761 11649181 2

Government  
Publications

Government  
Publications







Digitized by the Internet Archive  
in 2023 with funding from  
University of Toronto

*Canada. Reconstruction and Re-establishment,  
Special Committee on, 1943/44*

SESSION 1943  
(HOUSE OF COMMONS)

*no 12*

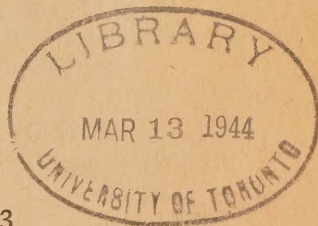
(SPECIAL COMMITTEE)

ON

# (RECONSTRUCTION AND RE-ESTABLISHMENT)

MINUTES OF PROCEEDINGS AND EVIDENCE *(and Reports)*

No. 1



TUESDAY, MARCH 9, 1943

THURSDAY, MARCH 11, 1943

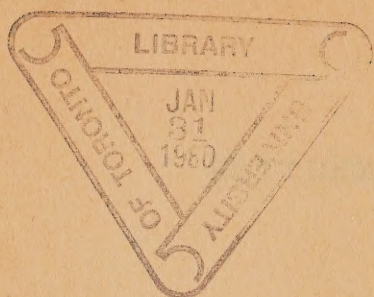
*and  
1st Report*

## WITNESSES:

Hon. I. A. Mackenzie, Minister of Pensions and National Health, and  
Chairman of the Cabinet Committee on Reconstruction.

Dr. F. Cyril James, Principal of McGill University, Montreal.

OTTAWA  
EDMOND CLOUTIER  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1943



## ORDERS OF REFERENCE

HOUSE OF COMMONS,

TUESDAY, March 2, 1943.

*Resolved*,—That a select committee of the House be appointed to study and report upon the general problems of reconstruction and re-establishment which may arise at the termination of the present war, and all questions pertaining thereto; with power to such select committee to appoint, from among the members of the committee, such sub-committees as may be deemed advisable or necessary, to deal with specific phases of the problems aforementioned, with power to said select committee and to such subcommittees as may be formed therefrom, to call for persons, papers and records, to examine witnesses under oath, and for such select committee to report from time to time to the House; and that the said committee shall consist of the following members: Messrs. Authier, Bertrand (*Prescott*), Black (*Cumberland*), Brunelle, Castle-den, Dupuis, Eudes, Ferron, Fraser (*Northumberland*), Gershaw, Gillis, Gray, Harris, (*Danforth*), Hill, Jean, Mackenzie (*Vancouver Centre*), MacNicol, McDonald (*Pontiac*), McKinnon (*Kenora-Rainy River*), McNiven (*Regina City*), Marshall, Martin, Matthews, Maybank, Mitchell, Nielsen (*Mrs.*), Poirier, Purdy, Quelch, Ross (*Middlesex East*), Sanderson, Stirling, Turgeon, Tustin, White, and that the provisions of Standing Order 65, limiting the number of members on special committees, be suspended in relation thereto.

Attest

ARTHUR BEAUCHESNE,

*Clerk of the House.*

---

TUESDAY, March 9, 1943.

*Ordered*,—That the said Committee be empowered to print from day to day, 1,000 copies in English and 400 copies in French of the proceedings and evidence of the Committee, and that Standing Order 64 be suspended in relation thereto.

*Ordered*,—That ten members constitute a quorum of the said Committee.

Attest

ARTHUR BEAUCHESNE,

*Clerk of the House.*

## REPORT TO THE HOUSE

TUESDAY, March 9, 1943.

The Special Committee on Reconstruction and Re-establishment begs leave to present the following as a

## FIRST REPORT

Your Committee recommends that it be empowered to print from day to day 1,000 copies in English and 400 copies in French of the proceedings and evidence of the Committee, and that Standing Order 64 be suspended in relation thereto.

Your Committee further recommends that ten members constitute a quorum.

All of which is respectfully submitted.

J. G. TURGEON,  
*Chairman.*

## MINUTES OF PROCEEDINGS

TUESDAY, March 9, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11.00 o'clock, a.m.

The following members were present:—Messrs.: Brunelle, Castleden, Dupuis, Ferron, Gershaw, Gillis, Hill, Jean, Mackenzie (*Vancouver Centre*), MacNicol, McDonald (*Pontiac*), McKinnon (*Kenora-Rainy River*), McNiven, Martin, Matthews, Mitchell, Poirier, Quelch, Sanderson and Turgeon.—20.

On motion of Mr. Martin, Mr. Turgeon was unanimously elected Chairman. Mr. Turgeon took the Chair and appropriately thanked the Committee for the honour conferred upon him.

On motion of Mr. McDonald (*Pontiac*), Mr. McNiven was elected Vice-Chairman.

On motion of Mr. MacNicol, it was

*Resolved*,—That the Committee ask leave to print from day to day, 1,000 copies in English and 400 copies in French of the proceedings and evidence of the Committee, and that Standing Order 64 be suspended in relation thereto.

On motion of Mr. Jean, it was

*Resolved*,—That the Committee request that its quorum be fixed at 10 members.

On motion of Mr. MacNicol, it was

*Resolved*,—That the Chairman should appoint a subcommittee on Agenda, the personnel of same to be announced at the next meeting.

The Chairman stated that Hon. Mr. Mackenzie, as Chairman of the Cabinet Committee on Reconstruction, would at the next meeting inform the Committee respecting progress made during the past year. He also stated that Dr. F. Cyril James, Principal of McGill University, would be present at the next meeting to give evidence.

On motion of Mr. McNiven, the Committee adjourned to meet again on Thursday, March 11, at 11.30 a.m.

THURSDAY, March 11, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11.30 a.m., Mr. J. G. Turgeon, the Chairman, presided.

The following members were present: Messrs. Authier, Bertrand (*Prescott*), Black (*Cumberland*), Brunelle, Castleden, Ferron, Gershaw, Gillis, Gray, Mackenzie (*Vancouver Centre*), MacNicol, McDonald (*Pontiac*), McKinnon (*Kenora-Rainy River*), McNiven, Marshall, Matthews, Nielsen (*Mrs.*), Poirier, Quelch, Turgeon, Tustin and White.—22.

The Chairman stated that this Committee had been re-established in accordance with the Government policy announced in the Speech from the Throne.

Hon. Mr. Mackenzie, Minister of Pensions and National Health, and Chairman of the Cabinet Committee on Reconstruction, at the request of the Chairman, gave the Committee a comprehensive report on the action taken by the Government in the past year dealing with reconstruction problems.

A copy of the report of the British Columbia Post War Rehabilitation Council on reconstruction was filed with the Chairman.

The Chairman expressed the thanks of the Committee to Hon. Mr. Mackenzie for his address.

Dr. F. Cyril James, Principal of McGill University, was called and examined.

Dr. James filed a statement and chart showing reconstitution of the Dominion Government Post-War Reconstruction Advisory Bodies.

The Witness referred to the report of Dr. L. C. Marsh on Social Security and Social Legislation in Canada and recommended that the Lever Report on reconstruction be procured for the Committee.

The personnel of the Subcommittee on Agenda was announced by the Chairman and is as follows: Messrs. Turgeon, McNiven, MacNicol, Jean, Hill, Gillis and Quelch.

On motion of Mr. McDonald (*Pontiac*), the Committee adjourned at 1.00 o'clock, p.m., to meet again at the call of the Chair.

J. P. DOYLE,

*Clerk of the Committee.*

## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

March 11, 1943.

The Select Committee on Reconstruction and Re-establishment met this day at 11.30 o'clock a.m. The Chairman, Mr. James Gray Turgeon, presided.

The CHAIRMAN: Gentlemen, we have a quorum; will you please come to order? I notice that the Chairman of the Senate Committee on Reconstruction, Senator Lambert, is here. Senator Lambert, will you please take a seat up here with us?

Senator LAMBERT: Thank you very much.

The CHAIRMAN: Dr. James will be here later. His train is reported 15 minutes late. In the meantime the Minister of Pensions and National Health is going to make a statement to us, but before he does I want to put on the record a short quotation from the Speech from the Throne. The question was raised in the house as to the importance of this particular committee in the general scheme of things relating to reconstruction; and there are two short paragraphs in the Speech from the Throne that relate to the setting up of this committee to which I should like to refer. I won't take up your time reading them, but I shall ask the reporter to put it on the record as a statement from me leading up to my introduction to the committee of the Minister of Pensions and National Health. It sets out the important things that must be done internationally and domestically, and then states:—

With your approval, the select committee on reconstruction and re-establishment, appointed at the last session, will be reconstituted.

The quotation reads as follows:—

The immediate object of the united nations is the defeat of the axis powers. Joint planning of operations on a world scale has accompanied preparations for intensive warfare. The united nations also aim at rendering aggression impossible in the future. Their governments, in addition to planning jointly for the prosecution of the war, have already entered into consultation regarding post-war problems. Achievement of their aims requires the establishment of conditions under which all peoples may enjoy equality of opportunity and a sense of security.

Every effort must be made to ensure, after the close of hostilities, the establishment, in useful and remunerative employment, of the men and women in our armed forces and in war industries. My ministers have already begun to explore the international agreements and domestic measures which will help to secure adequate incomes for primary producers and full employment after the war. With your approval, the select committee on reconstruction and re-establishment, appointed at the last session, will be reconstituted.

If that is satisfactory I will ask the Hon. Mr. Mackenzie, the Minister of Pensions and National Health, to make a statement to us. You will remember that the work of our committee started last year under his auspices, not only as Minister of Pensions and National Health, but as chairman of the Cabinet Committee on Reconstruction. He has been more or less the director of things relating to reconstruction since the beginning of the war.

I now ask Mr. Mackenzie to make his statement.

Hon. Mr. IAN MACKENZIE: Mr. Chairman and gentlemen, a year ago the proceedings of this committee were opened with two comprehensive statements—one by myself, as Chairman of the Cabinet Committee on Demobilization and Re-establishment, the other by Principal James, as Chairman of the Advisory Committee on Reconstruction set up by the cabinet committee.

We went on to hear others of Principal James's colleagues, and were assisted in obtaining a broad view of the vast and intricate problems that will face the Dominion of Canada when the war ends. With that grounding in our subject, I believe we can as a committee go much farther this year and contribute, from our own knowledge and experience as members of parliament and representatives of the people, something definitely constructive towards a solution of those grave problems.

This committee made only a short interim report last year, but the influence of its work was widespread and profound. It provided an authoritative forum wherein were discussed the nature and extent of the studies initiated by the various committees and subcommittees that had been set up. Our proceedings were printed and published.

I am sure you have all had the same experience as myself in observing the great influence that the proceedings of this committee have had upon public thought and discussion throughout the country. We have seen it in lectures and sermons, in newspaper editorials and magazine articles, in whole issues of serious periodicals given over to a discussion of reconstruction problems and in many other ways—perhaps, if I may say so, in the terms of a party platform adopted during the recess.

The splendid constructive speeches made in the house when the motion for the re-appointment of this select committee was under debate owe much to the stimulation of thought resulting from the proceedings of this committee last session.

This word "reconstruction" has had a peculiar history in its present context that is worth briefly reviewing. It came into prominence at the time of the American Civil War and was used, in the first instance, in its literal sense. That war had devastated large areas which had to be rebuilt. But, in approaching that task, the American people found there was more than physical reconstruction to be undertaken—there was broad economic and political reconstruction as well. When Americans to-day talk of their "reconstruction period," they are thinking less of the rebuilding of cities and towns, of dwellings and of farm buildings, than of the economic rehabilitation that was necessary.

Similarly, at the time of the great war, the word "reconstruction" was first used in relation to the devastated areas of Belgium and northern France, just as to-day, in Britain, it refers to the rebuilding of Coventry, of London's East End and other areas bombed and burned by the enemy.

But because, even at the time of the great war, it was applied also to the great economic and political changes which had to be controlled and directed in the post-war period, we in Canada, who have mercifully been spared the immediate horrors of war's destructiveness, have come to use it in its abstract sense entirely.

In our governmental vernacular, we have come to think of "reconstruction" as primarily the creation of a post-war economic condition in which there shall be gainful employment for all our people. "Social security" we think of as a result of ensuring that any imperfections in our post-war planning do not impose undue hardship upon the individual.

"Civil re-establishment" or "rehabilitation" are words that we use in direct relationship to the ex-service man's personal problem—his restoration to productive and useful civil life.

So the three phases of the problem, in the terminology that has grown up, may be described as:—

*Civil re-establishment*—helping the ex-service man to be ready for a job.

*Reconstruction*—having enough jobs ready for all.

*Social Security*—achieved through protective measures against personal adversity—unemployment, sickness, an unprovided-for old age.

It is the second of these that is the special subject of reference to this committee, although the government has been concerned with all of them.

As I informed the house in my own brief remarks at the close of the debate, the government's policy with regard to reconstruction can be summed up in one word—"preparedness." The making of concrete plans and the drafting of specific programmes is something that is neither wise nor possible at this stage. There are too many uncertainties about the future, while we are engaged in a war for survival and the issue of our struggles is still undetermined.

George Luxton, in a contribution to the Dalhousie University Quarterly, "Public Affairs," stated the situation admirably when he said:—

It is idle for us at the present time to draw up detailed blueprints showing how the "employment gap" will be closed. So much depends both in Canadians possessing the same unity of purpose as they have had in war time, and on an international atmosphere of mutual co-operation. But we can fruitfully consider the major determinants of the solution.

Perhaps we in this committee can exert some influence upon preserving the wartime unity of the Canadian people.

Mr. Luxton went on to indicate three types of "current planning which are decidedly worth while":—

1. Preparation for the first stages of demobilization—the order in which troops and war workers are to be demobilized; the problems of reconversion of industry; the institution of public works etc.—

—for which phrase I would substitute "publicly assisted enterprise."

2. The preparation of minimum standards of social welfare and social security.

This is a specialized field that has been assigned by the House of Commons to another select committee, and will not need to concern us directly here.

3. Concrete research into the industrial and employment structure of the Canadian economy. Only with the aid of such industry studies can we estimate the "employment content" of different post-war programmes and the effect of each on different regions.

As Principal James and others will be able to tell you, a great deal of progress has already been made upon all three of the lines suggested by Mr. Luxton.

Probably the greatest service I can render this committee at the outset of its deliberations is to place briefly and concisely on record what has been accomplished to date. With this before us, the committee can save much time and get on to the essentials of its task, which is to offer constructive advice in the fields where so much remains yet to be done.

A year ago I explained the nature of the organization established by the government to deal with post-war problems, and I reviewed extensively the measures actually taken with particular reference to civil re-establishment of members of the forces discharged during and after the war.

I placed on record the orders in council appointing the Cabinet Subcommittee on Demobilization and Re-establishment and its two advisory bodies:—

The General Advisory Committee on Re-establishment, presided over by Brig. Gen. H. F. McDonald; and

The Committee on Reconstruction, presided over by Principal James.

There has been some change in the government organization which should now be described.

The Committee on Reconstruction no longer reports through the Cabinet Subcommittee on Demobilization. It reports to the government as a whole through the president of the Privy Council. The terms of reference to the cabinet subcommittee have been redefined in accordance with this change.

Also—the government's Advisory Committee on Economic Policy, appointed on September 14, 1939, has had its functions broadened so as to give it the authority to deal with post-war economic policy.

These steps were provided for in P.C. 608, of January 23, 1943.

The procedure now is that the James committee reports to the president of the council; its reports are reviewed by the Advisory Committee on Economic Policy, and, where action is called for, the subject-matter is referred to the appropriate department of government.

The reasons for this change are easy to understand. The Committee on Reconstruction consists of men outside the public service, giving only part of their time to this task. Their function has been to stimulate and organize studies and researches with a view to assembling facts, to insuring that all possible phases of the subject are brought under review and, ultimately, to make recommendations to the government.

The Economic Advisory Committee, on the other hand, consists of senior government officials experienced in practical administration of government departments. Many of them are specialists in connection with fiscal policy and administration, possessed of much confidential and even secret information as to international aspects of financial matters. The Economic Advisory Committee has been working in close liaison with the Committee on Reconstruction, and one of its member is an ex-officio member thereof.

The changed procedure reflects the growing sense of urgency with regard to post-war planning. It is realized that the time has now come for action.

An advisory committee of private citizens outside the public service can study and recommend. Only a department of government can organize and act.

Reconstruction is a problem of the whole government. Hence, both committees now report to the president of the council, and the procedure for translating the Reconstruction Committee's studies and researches into active plans and organization has been created.

Members of this select committee, familiar as you are with what has been done, will not infer from the foregoing that no action has been taken in the field of post-war planning. Perhaps, however, it will be of assistance to the committee if I review concisely the actual steps that have been taken.

1. *Price Control* was initiated at the outbreak of the war to prevent the disastrous deflation that would follow unchecked inflation during the war period. It is and always has been partly a post-war measure.

2. *Unemployment Insurance* was introduced during the wartime period of full employment as a protection to the million or more war-workers, many of whose jobs will necessarily end when hostilities cease.

3. *Compulsory Savings*, introduced as a feature of the income tax, will, together with the voluntary savings encouraged by the sale of victory bonds and war savings certificates, provide for great numbers of our people a nest-egg which will be of inestimable value to them in the transitional period, and will provide purchasing power in the hands of the people at a time when our economy may need this stimulus.

4. *Prairie Farm Rehabilitation* has developed a technique and programme for better utilization of the resources of the prairie provinces. Many of these methods can be adapted to the reclamation of other areas in need of rehabilitation.

5. *International Measures*, such as Canada's formal subscription to the principles of the Atlantic Charter and the more specific recent agreement between Canada and the United States, have placed Canada definitely on the side of post-war economic development based on freer interchange of commodities and against the development of nationalistic economic policies, such as followed the last great war. Our new United Nations' "Lend-Lease" policy may also have a profound effect.

6. *The Census* was held and was not postponed specifically and definitely because the information thus assembled is essential to post-war planning. It takes two years after the census to get out the facts. They are only now beginning to come forward.

7. *Civil Re-establishment of Veterans* is a field in which our legislation and administrative procedure is to-day practically complete and in operation. I shall discuss this further in a moment.

8. *The assembling of economic data* upon which Government can base specific reconstruction policies has been the work of the James Committee on Reconstruction. As your deliberations continue, you will have the opportunity to learn how thoroughly this responsibility has been discharged.

9. *Social Security* has also been the subject of intensive activity, as will appear when the select committee appointed to consider that subject begins its sessions.

It is not suggested that the foregoing is an exhaustive list of steps already taken with a view to assisting Canada through the post-war period. They are simply items that come quickly to mind, and they are comprehensive enough to show that, even in the midst of War, the government has kept its eye on the long-range welfare of the country.

A year ago—I reviewed the measures that had been taken to assist ex-members of the forces in their problems of civil re-establishment.

It may be convenient if I now bring this information up to date.

Let me first list the legislative measures that have been taken:—

Revision of the Pension Act 1941.

Compulsory Re-instatement Act 1942.

Vocational Training Co-ordination Act 1942.

Veterans' Land Act 1942.

The extension by Order in Council of the Civil Service preference to veterans of the present war—1942.

The Post Discharge Order in Council 1941.

In addition, there have been repeated amendments and revisions of the department's treatment regulations.

The Department of Pensions and National Health has also created a Welfare Division under the direction of the Associate Deputy Minister, and within that division we have established educational and training services.

With the organization of Women's Auxiliary Forces, the general body of our pensions and re-establishment measures have been amended to make them applicable to ex-service women.

Pension and medical treatment provisions have also been made for other classes of Canadians who are contributing to the war effort.

Among the classes thus benefited are:

Merchant seamen.

Fishermen.

Auxiliary Services, such as the Y.M.C.A. et al.

Overseas Fire Fighting Service.

Civil Government employees serving abroad.

Air Raid Precautions workers, now to be known as Civilian Protection Workers.

Special Constable Guards of the R.C.M.P. and, of course, domiciled Canadians who are serving with the Imperial forces.

To assist the government in planning its rehabilitation measures, the General Advisory Committee, with the co-operation of the Department of Labour, submitted a questionnaire to approximately 350,000 members of the forces as to their educational background and their previous occupational history.

I made a public statement about the results of this questionnaire the other day, and I am tabling a copy of that statement for this Committee's information.

Eighty-five per cent of the men who joined Canada's armed forces in the first three years of the war left gainful employment to enlist, and three per cent left school to enlist.

This fact supported by first-hand statistical evidence disposes of a too-widely held canard, creditable neither to Canada nor to the armed forces, that a big proportion of our recruits were either unemployed or youths who had never been able to obtain work.

An interim tabulation of 347,900 occupational histories shows that only about ten per cent were unemployed in the sense of being men accustomed to work as employees and out of work at the time of enlistment. In the large sample, the number who had never worked, exclusive of students, was only 2,646, or about seven-tenths of one per cent.

This information is gleaned from a questionnaire prepared for the Demobilization Committee of the Cabinet, and analysed by the Department of Labour.

The 347,900 questioned include 320,157 on active service and 27,743 had been discharged prior to June 30, 1942. A rough approximation of the situation with regard to the whole Canadian Forces can be made by multiplying any figure by two.

If the 347,900 covered by the questionnaire be regarded as the first half of the men to enlist, this formula must be treated with caution. Normal civil employment has been much greater in the past year or two than it was when war broke out. Also the average age of the later recruits would probably tend to be a little higher than in the first half.

No fewer than 65 per cent of the 347,900 were in the age group from 18 to 27 inclusive.

42 per cent had dependents.

56 per cent declared they had no dependents.

About 4,800 did not give any information as to dependents.

This does not mean that 42 per cent were married, as many of the dependents are parents and other members of the family.

The purpose of the questionnaire was to get some information that would be helpful in demobilization and re-establishment plans.

In this connection the number actually employed at the time of enlistment is most informative. Following are the figures:—

| <i>Employed</i>                |         | Approximate<br>per cent |
|--------------------------------|---------|-------------------------|
| As employee .....              | 271,399 |                         |
| On own account .....           | 26,961  |                         |
| Total .....                    | 298,360 | 86                      |
| <i>Unemployed</i>              |         | Approximate<br>per cent |
| As employee .....              | 34,720  | 10                      |
| On own account .....           | 1,241   |                         |
| Never gainfully employed ..... | 2,646   | 0·7                     |
| Student .....                  | 10,598  | 3                       |
| No information .....           | 335     | 0·1                     |
| Total .....                    | 49,540  |                         |

Leaving out the students, the number who may be considered as unemployed in the sense of looking for work is only 38,607, or just over 10 per cent of those questioned.

Of the 271,399 who left employment to enlist, no fewer than 114,441 state that they have definite promises from their former employers to take them back on their return. Approximately another 1,000 have conditional or indefinite promises, and the number who have no such promise was 143,315, though, in many of these cases, employers are obligated to reinstate these men by the terms of the reinstatement in Civil Employment Act.

These, with the 38,607 who were unemployed on enlistment constitute the core of the re-establishment problem of this sample.

The educational qualifications of these men will have a bearing on their re-establishment and the following information was obtained:—

|                                   |         |         |
|-----------------------------------|---------|---------|
| No schooling .....                | 1,382   |         |
| Primary school incomplete .....   | 62,897  |         |
| Primary school complete .....     | 82,191  |         |
| Junior Matric. incomplete .....   | 102,892 |         |
| Junior Matric. complete .....     | 31,648  |         |
| Senior Matric. incomplete .....   | 1,120   |         |
| Senior Matric. complete .....     | 12,065  |         |
| Technical school incomplete ..... | 13,143  |         |
| Technical school complete .....   | 2,901   |         |
| Teachers' course .....            | 1,467   |         |
| Stenographers' course .....       | 3,512   |         |
| Secretarial course .....          | 5,129   |         |
| Correspondence course .....       | 1,049   |         |
| No information .....              | 5,335   |         |
|                                   |         | 326,731 |

|                                     |              |
|-------------------------------------|--------------|
| University incomplete .....         | 11,570       |
| Univ. complete, No degree.....      | 393          |
| Degree B.A., M.A. ....              | 3,692        |
| B.Sc. (Chem. Mining) .....          | 1,355        |
| B.Sc., M.Sc. (Civil, Mechan.) ..... | 746          |
| M.D., C.M., Medicine Surgery .....  | 1,177        |
| B.A., etc., Theology .....          | 148          |
| Other degrees .....                 | 2,075        |
| University training .....           | ....         |
| No information .....                | 13           |
|                                     | <hr/> 21,169 |
|                                     | 347,900      |

Another interesting and useful figure with regard to training is the tabulation regarding apprenticeships:—

|  |        |
|--|--------|
| Complete .....                         | 32,042 |
| Incomplete .....                       | 22,835 |
| Wish to complete.....                  | 7,872  |
| Entered, but no other information..... | 198    |

Of the 26,961 who were employed in business on their own account at the time of enlistment, the following information as to their future plans was obtained:—

|                     |              |
|---------------------|--------------|
| Definite .....      | 16,150       |
| No plans.....       | 8,254        |
| Conditional .....   | 114          |
| Undecided .....     | 611          |
| Indefinite .....    | 309          |
| No information..... | 1,523        |
|                     | <hr/> 26,961 |

The number interested in farming as their post-war career was ascertained in two groups, those with less than two years' experience, and those with more than two years' experience.

|                    |              |
|--------------------|--------------|
| Under 2 years..... | 8,548        |
| Over 2 years.....  | 56,504       |
|                    | <hr/> 65,052 |

These are divided by provinces as follows:—

| Province                  | Under<br>2 years | Over<br>2 years | Total        |
|---------------------------|------------------|-----------------|--------------|
| Prince Edward Island..... | 65               | 954             | 1,019        |
| Nova Scotia.....          | 668              | 3,170           | 3,838        |
| New Brunswick.....        | 515              | 4,399           | 4,914        |
| Quebec .....              | 2,082            | 6,690           | 8,772        |
| Ontario .....             | 3,122            | 14,333          | 17,455       |
| Manitoba .....            | 406              | 4,854           | 5,260        |
| Saskatchewan .....        | 440              | 9,417           | 9,857        |
| Alberta .....             | 436              | 8,130           | 8,566        |
| British Columbia.....     | 630              | 4,089           | 4,719        |
| Other .....               | 166              | 386             | 552          |
| No information.....       | 18               | 82              | 100          |
|                           | <hr/> 8,548      | <hr/> 56,504    | <hr/> 65,052 |

The questionnaire provides a great deal of other information, not all of which has yet been taken out statistically. For instance, the following facts can be ascertained:—

Date of enlistment.

Age on leaving school.

Apprenticeship period served.

Languages (a) spoken (b) read.

Unemployed—whether or not employed fairly regularly since leaving school.

Occupational breakdown showing years of experience.

Farming—

(a) Competence.

(b) Type of farming in which interested.

(c) Whether born on farm.

(d) Actual years of experience.

(e) Province of experience.

It was gratifying to learn from the questionnaire that, out of 347,900 members of the forces, only 35,961, or 10 per cent, could be classified as unemployed at the time of their enlistment, and the number, aside from students, who had never worked at all was only 2,646 out of 347,900.

Those authentic figures correct a widespread misapprehension as to the nature of the re-establishment problem.

All the legislation and the regulations that I have mentioned are actually in operation. Let me give you some facts and figures.

At the outbreak of war, the Department of Pensions and National Health had in its own departmental hospitals a maximum capacity of 3,588 beds.

To-day, that capacity has been expanded to 9,419.

In addition, we have several thousand complete beds in storage for emergency use.

The department has also greatly increased its number of contracts with municipal and private hospitals throughout the country, since a portion of our treatment cases are cared for in these general hospitals. The department is, therefore, in a position to meet promptly any sudden emergency.

At the outbreak of war, the number of patients on our departmental strength was 2,048. These were all veterans of former wars.

On January 31, 1943, the number of patients on our strength was 6,235, of whom 4,153 were members or ex-members of the forces serving in the present war, and 2,082 were cases arising from former wars.

Of the 4,153 cases arising out of the present war, 3,053 are still members of the forces, and 1,100 are discharged personnel.

The number of persons discharged from the armed forces in the present war is now approximately 75,000, and the Canadian Pension Commission has reviewed and given first hearing decisions with respect to 31,841 of those discharged as medically unfit.

The number of pension awards made with respect to members of the Canadian armed forces is 5,253, including one member of the Canadian Women's Army Corps.

The number of disability pensions in payment for members of the armed forces is 3,286, and the number of pensions to dependents arising out of the death of a member of the forces is 1,966.

Of the 5,253 pensions in payment, 3,742 are with respect to men who served in a theatre of actual war, and 1,511 are with respect to personnel who served in Canada only.

The Canadian Pension Commission has made 330 pension awards with respect to personnel other than members of the Canadian Forces.

There were 22 disability awards, including 16 to mariners and 6 to Canadians serving with the Imperial forces.

There have been 308 awards to the dependents of those who lost their lives, including 274 mariners, 1 member of the Auxiliary services, 4 civil government employees, and 29 Canadians serving with the Imperial forces.

In addition, the commission is paying detention allowance to the dependents of 122 members of the merchant marine who are held by the enemy as prisoners of war.

It may interest the committee to know also that included in the foregoing totals are 620 awards made under Section 11 (3) of the Pension Act, which is the section permitting the commission to make an award with respect to death or injury incurred by a member of the forces in Canada when the death or disability did not arise directly out of service but occasioned serious economic hardship upon the injured man or his dependents.

Under the Post Discharge Order, the Department of Pensions and National Health was authorized to make subsistence grants for the purpose of assisting discharged members of the forces in their rehabilitation under five sets of conditions—

1. While out of work,
2. while receiving vocational training,
3. while awaiting returns from farming or business enterprise,
4. while temporarily incapacitated and receiving physical reconditioning treatment, and
5. while resuming interrupted higher education.

All of these benefits have been awarded to varying unumbers of men whose re-establishment could be assisted thereby.

Since the order in council became operative, the number of individual discharged members of the forces who have received assistance for varying periods was 4,186 up to January 31, 1943.

It frequently occurs that a man upon first coming to the attention of the department is awarded out-of-work benefit for a week or two until further enquiry indicates that he should receive vocational training.

For this reason, the records can be misleading unless carefully interpreted.

For instance, the number of awards of the five different types of benefit adds up to approximately 10,000, but this figure may include the same man during two or three out-of-work periods and, in many cases, would include a man who has received two different benefits. First, probably out-of-work benefit, and later, by transfer, vocational training benefit.

The actual number of individual discharged persons who have received benefits up to January 31, 1943, was 4,186.

Classifying them by the heading under which they received their first award, the numbers of each group would be as follows:—

|   |       |
|---|-------|
| Out-of-work benefit .....               | 1,862 |
| Vocational training benefit .....       | 874   |
| Farmers or others awaiting returns..... | 68    |
| Temporarily incapacitated .....         | 1,363 |
| Continued education .....               | 19    |

In the month of February, the number assisted under the various headings was as follows:—

|                                 |     |
|---------------------------------|-----|
| Out-of-work .....               | 221 |
| Vocational training .....       | 338 |
| Awaiting returns .....          | 20  |
| Temporarily incapacitated ..... | 349 |
| Continued education .....       | 22  |

You will at once notice a discrepancy under the heading of "continued education".

I gave you the figure 19 as the total number receiving original awards of assistance under this heading, yet, at the end of February, the number was 22.

The explanation is that three of the persons receiving educational assistance originally came on the department's rolls as recipients of some other benefit, presumably either out-of-work benefit, or assistance while receiving physical reconditioning.

Indicative of the rapidity with which discharged men find employment is the fact that, during the month of February, out-of-work benefit was given to 221 men, but the number on the rolls on the last day of the month was only 126.

The 221 included both new awards during the month, and men who were already on the list in the preceding month.

The true reflection of the speed with which these men find work after their discharge is to be found in the number actually on our out-of-work benefit rolls on any given date.

Our records show that we have seldom had more than 200 receiving this benefit at any one time, and a substantial majority have not required out-of-work assistance for more than two weeks.

The cash outlay in these various benefits for the past six months was as follows: September, \$16,833; October, \$17,109; November, \$19,287; December, \$24,219; January, \$29,476; February, \$28,701.

I note by reviewing the entire period that the winter months tend to be higher than the summer months.

There are two observations of general public importance that should be made with regard to the operations of this Post Discharge Order.

The first is our appreciation of the splendid co-operation which has been received from employers in responding to our appeals for assistance in providing employment for our discharged men.

In most of the large cities, the Government Employment offices and our Veterans' Welfare officers have been assisted by Citizens' Committees formed for the special purpose of welcoming and assisting discharged men back into civil life.

We need committees such as these in every community throughout Canada, and members of parliament can render constructive assistance to the problem of re-establishment by surveying their own constituencies with a view to encouraging the formation of committees where they do not exist. By familiarizing themselves with the opportunities afforded by government regulations, and appealing to employers and others in the community to co-operate in measures which do not come within the scope of governmental activity, the members of these committees can do great and important work.

Another observation arising out of the experience of the departmental officers is that they are having difficulty in persuading young men to take vocational training which is available for them. One explanation is that benefits rates may be too low. There have been some complaints in that regard.

During the war, we have practically unlimited employment opportunity, and it is easy for men with or without skill to obtain work. We have encountered numbers of young men with no training or partial training whom the departmental officers have tried to encourage to take the training which will increase their earning power throughout their lives, but who have preferred to take immediate employment opportunity because, for the moment, it offered them a better rate of pay.

Later on, when competition in the labour market becomes more acute, these young men will regret their lack of skill, a lack which might have been overcome by accepting the vocational training assistance offered by the Department

of Pensions and National Health in conjunction with the Department of Labour.

Members of parliament can do much to assist these young men by acquainting their constituents with this problem, and creating an environment which will encourage our discharged men to seize the opportunity of improving their prospects in life by acquiring a marketable skill.

Another point that I should like to emphasize is the desirability of provinces and municipalities adopting the definite policy of giving to ex-service men a preference in public employment.

These young men have proved the quality of their citizenship by their service, and they are the type of men who should be preferred in the field of public service, whether it be dominion, provincial or municipal.

Such are the results to date of the measures taken for the assistance of ex-service men and women in their personal rehabilitation problems.

The program is about as broad as it could be, but I am far from insisting that, in their present form, all our measures are one hundred per cent satisfactory.

The General Advisory Committee and our departmental officers are maintaining a continuous study of the operation of these measures, and changes in our regulations and in administrative policy are effected repeatedly as we encounter new situations not adequately covered by existing provisions.

Particularly in the realm of medical treatment and maintenance of the dependents of those who require medical treatment after discharge do we find it necessary to modify and change our regulations from time to time.

At the present moment, we have two or three committees in my own department engaged in studying special phases of the treatment problem, with a view to improving the regulations so that they may serve the ultimate purpose which we all have in mind, namely, that our ex-service men shall have the benefit of the best that medical science can provide to insure their return to civil life fit and able to carry on.

The General Advisory Committee on Rehabilitation, consisting as it does of both civilian and military officials of the government, has been greatly assisted by experts from outside the public service called in to assist its various subcommittees. Eight of these subcommittees have completed their work and have been discharged or are about to be discharged as a result of their recommendations having been adopted or acted upon either by acts of parliament, order in council, or through administrative procedure.

These eight subcommittees were the ones dealing with:—

- Preference in Public Service.
- Land Settlement.
- Interrupted Education.
- Post-discharge Benefits for Women.
- Administration of Special Funds.
- Vocational Training.
- Recondition of neuro-psychiatric cases.
- Post-discharge Pay.

The remaining subcommittees whose work is continuing are those dealing with:—

- Employment.
- Retraining of special casualties.
- Special Problems of Discharged Women.
- Returned Soldiers' Insurance.
- Demobilization priorities.

On this last subject, the objective is to insure a program of orderly demobilization into an environment of opportunity, which environment is the specific subject that the house has referred to this select committee.

Before passing from the subject of civil re-establishment, I should not fail to note the great contribution to our existing program made by committees of the House of Commons.

The revision of the Pension Act and some twenty odd amendments to administrative regulations were adopted upon recommendation of a house committee in 1941.

Last session, other committees made valuable contributions to the Veterans' Land Act and Vocational Training Co-ordination Act now on the statute books.

The subject of canteen funds was also dealt with by a committee of the house in a constructive report tabled last year.

It is well that these facts should be recalled as we now proceed in this committee to consider an even wider aspect of our post-war problems, that of economic reconstruction.

#### *Reconstruction Committee:*

In view of the fact that you will hear from Principal James and other members of his committee, as well as from members of the Advisory Committee on Economic Policy, it will not be necessary for me to deal quite so fully with the work that has already been done in the field of reconstruction.

As I mentioned a few minutes ago, the chief function of Principal James and his associates has been the assembling of economic data which may serve as a guide to the government in determining policy.

This has included the study of what has happened after other wars, including especially the last war; the extent to which similar economic influences are at work in this war; the extent to which certain types of post-war problems have been headed off by economic policies pursued during the war.

In the light of the foregoing, the committee has sought to foreshadow, as far as may be deduced, the probable sequence of economic events after the war and the type of measures which will be needed to maintain full employment during the transition period, when war industry ceases and before peace-time industrial production is in full operation.

The committee has given attention to the extent and location of our new industrial resources and the civilian uses to which they can be put; the requirements of agriculture; and the type of conservation measures applied to our natural resources which will create immediate employment and add to long-range prosperity, such as reforestation, irrigation, development of fisheries, etc.

The committee has kept in touch with what the provinces are doing:—

British Columbia, by act of the legislature, has set up a Post-war Rehabilitation Council, presided over by a member of the cabinet, which has already made a comprehensive report.

This report is here. I think the chairman has a copy of it. It is available for the committee if they wish to study it.

In Alberta, the Research Council of that province, modified somewhat for the purpose, has been established as the provincial contact of the committee on reconstruction.

In Saskatchewan, the premier has taken a direct personal interest, and I am advised that he contemplates the appointment of a cabinet committee.

In Manitoba, the former premier, Mr. Bracken, initiated a study of reconstruction problems in every department of the government, and asked each department to submit a programme. Attention is being given particularly to the advantages of rural electrification.

That report is now published and is available.

Ontario has set up an interdepartmental committee on reconstruction and rehabilitation, and many of the individual departments of the Ontario government have been co-operating closely with the committee on Reconstruction.

According to reports, they are setting up a special committee of the house to deal with the same problems.

In Quebec, the Legislative Council, the upper chamber of the Legislature, has been charged as a body with the consideration of reconstruction problems, and Colonel Bovey has been named as chairman of its committee. They are going ahead very actively at the present time in the province of Quebec.

In Nova Scotia, the services of the government's Economic Council are being utilized.

In New Brunswick, the premier is setting up a cabinet subcommittee under his own chairmanship. This committee will have a liaison officer to work in conjunction with Ottawa.

With regard to Prince Edward Island, I have no definite information at the moment of measures adopted in that province.

The committee on Reconstruction has been alert to note what has been written, said and done in other lands; what has been done and is being done in Canada by government departments, by provinces and municipalities, by industrial, commercial, agricultural and scientific associations, by parliament and press, by the universities and all others who have been working to the same end.

They have gathered around them more than 100 co-workers in specialized fields as investigators and as members of subcommittees.

They have stimulated and directed intensive studies of a wide range of subjects, all directly related to post-war reconstruction.

They have compiled and assembled in one comprehensive memorandum the collective results of these various studies and researches, both those conducted by others outside the committee and those directed by themselves.

Specific recommendations have been few. Some there will be, but these are not the real result.

The great thing that they have accomplished is that they have assisted the government to see the problem as a whole and the right place for an almost infinite number of individual plans and proposals.

Now it is important that the people's representatives in a select committee of this house should review what has been done, check it and test it by the yardstick of public opinion.

We, as representatives of the people, directly responsible to them, familiar with their immediate wants and needs, intimately acquainted with conditions in every part of Canada, can render a great service to the dominion, by examining the work of Principal James and his associates; by adding our own contribution, the product of our own experience as members of parliament; and by sending forward to the house a report which may profoundly influence the course of Canadian history during the next generation.

And, in conclusion, let me say that the value of the work of the Committee on Reconstruction is not to be measured in statistics. If the committee ceased to exist to-morrow, it would still have rendered a great service, in that, for eighteen months, the problems of post-war Canada have been the chief concern of six trained minds.

Before them they have had as their ideal one that I saw beautifully and simply stated the other day in an English periodical in words that may be a guide and inspiration to us all in facing the problems that lie ahead:—

“Work is more important than unemployment insurance;

“Health is more important than sickness benefit;

“Accident prevention and rehabilitation are more important than disability pension;

“Independence is more important than doles.”

Mr. Chairman, to you and to my fellow members of the committee, I extend the best wishes of the government for success in the important task that is now being undertaken. Officers of the government and members of the various com-

mittees will be available to assist us in our work with direct evidence and by production of documents and records which may be asked for. As a member of this select committee, and as a member of the government, I shall, of course, be only too glad to co-operate personally in every possible way.

The CHAIRMAN: I am sure we all deeply appreciate the work of our minister, who is himself a member of the committee, in presenting his statement before us this morning. I remember last session we decided that we would take time to study the statement made by the minister, and would not proceed with questioning at the time of its presentation. I am assuming, particularly since we have here with us Principal James, who has made a trip, on delayed trains this morning, from Montreal in order to be with us, that we would follow the same procedure with respect to the minister's statement this year. If that is so, I would then call on Dr. James. I do not know whether he has his breath back again or not. It seems to be a custom of his to be delayed. I had the pleasure of being one of a Canadian Club audience in Vancouver during the recess which had gathered together to hear Dr. James. On that occasion his train was, I think, one and a half hours late.

Dr. JAMES: Four hours late.

The CHAIRMAN: I stand corrected. Four hours late. He arrived about one and a half hours late for the luncheon and gave us an excellent statement without having had anything to eat since early morning breakfast.

I am now going to ask Dr. James to make his presentation. You will remember that last year he broke his statement up into different phases so that each one could be more intelligently questioned by members of the committee than would have been possible if he had made a continuous statement for the whole sitting. I understand from him, as a result of a whispered conversation, that he is prepared to do that this morning. I therefore will call on Dr. James, with the understanding that he will make a short statement which will be subject to questioning.

Dr. F. CYRIL JAMES, Principal of McGill University, Montreal, called.

The WITNESS: Mr. Chairman, first of all, I should like to apologize for being late, but I will not take any responsibility for that. I am afraid it is the railroads that are chiefly responsible.

With your permission, sir, I am not going to enter into a comprehensive statement of the kind that I made last year, because most of the members of this committee are already familiar with the general structure of that statement, most of which still applies equally effectively at the present time. I should like this morning to amplify that statement, and to point out the changes that have occurred in the structure of the committee and its operations, to bring you up to date with the work that has been done; and then to suggest some of the paths that lie immediately ahead of us. I would add, however, that if there are any questions that any member of the committee wishes to ask in amplification of what I am saying, I will do my best to answer them.

The first thing to which the minister referred briefly arises out of two Orders in Council that were passed a few weeks ago, under which the committee on reconstruction had its name changed to the Advisory Committee on Reconstruction, which more adequately describes its purposes; and its functions, vis a vis the Advisory Committee on Economic Policy, are more clearly defined and suggested. It was recognized to be impossible, as I pointed out when I had the privilege of talking to you last year, that the Advisory Committee on Reconstruction could assume or pretend to assume complete responsibility for all of the planning and preparation that needed to go forward. We were assisted to a very great extent, and always with courtesy and generosity, by all of the various departments of the Dominion government, as well as by the

provincial governments. But it became apparent, in the course of the work that has been going on for the last eighteen months, that the actual coordination of the work which is being done in the several departments of the Dominion government could be more effectively handled through the interdepartmental committee which had already performed valuable services in connection with the war effort. By Order in Council, therefore, the Advisory Committee on Economic Policy now assumes the direct and primary responsibility for coordinating and advising on all the preparations for the post-war period which need to be made immediately by the several government departments. The work of our own committee continues in the same terms as previously. I want to say at this point that every member of the committee is deeply appreciative of the new organization; that we have, and are receiving the closest co-operation from the chairman of the Economic Advisory Committee, and that by the close coordination of the work of these two committees I think we shall be able to make even more rapid progress than heretofore.

Mr. Chairman, I am going to give you a copy of a brief statement describing these Orders in Council which would be, I am afraid, rather dull to read to members of the committee. I have some copies here if members would like to have them. I am attaching to that a chart which I will refer to in a moment. One aspect of the case, while desirable from the point of view of government organization, leads me to offer a word of personal regret and of very deep appreciation. With the consent of the Minister of Pensions and National Health, and in part by his advice, the War Cabinet decided that the Advisory Committee on Reconstruction is, in future, to report directly to the Prime Minister rather than to the chairman of the Cabinet Committee on Demobilization and Rehabilitation. As I say, that is entirely a desirable thing in terms of administrative procedure, but the relations of our committee to Mr. Mackenzie have been so close and so friendly, and his activity in the work has been inspired not only by his understanding of and enthusiasm for it but by a deep and profound vision of its importance. I would like, therefore, to take this occasion of thanking him very deeply, not only on my own behalf, but on the unanimous behalf of my committee, and to tell him that we feel we are suffering a loss in being even thus partly detached from him in the future development of the work.

In regard to the internal structure of the committee two developments have occurred since I last had the pleasure of talking to you. In addition to the subcommittees which I described on the last occasion, the subcommittee on agricultural policy under Mr. McKenzie, on conservation and development of resources under Dr. Wallace, on post-war construction projects under Mr. Cameron, and on employment opportunities under Mr. Bengough who has succeeded Mr. Tom Moore since his illness, we have set up two additional committees, one on the problem of housing and community planning, which is increasingly recognized to be an important and integral part of the post-war development of this country. Professor C. A. Curtis of Queen's is chairman of that committee on which is represented the National Housing Bureau and War-time Housing as well as architects, engineers and others from almost each of the provinces of the dominion. It is hoped that the committee, which is working very strenuously at the present time, will be able by the end of summer or early autumn to present a comprehensive report to the government recommending a satisfactory post-war housing program for the dominion. We have also set up, under the chairmanship of Mrs. McWilliams of Winnipeg, a special subcommittee of women, the task of which is to study the difficult, and in some senses peculiar problems, which will confront women in war industry and government services at the end of the present war. That committee has not yet met, although it has done some preliminary investigation, and I hope that there will be, in this session or early in the next session, a report coming forward from that committee.

I should also like to say that, although not directly under the Advisory Committee on Reconstruction, there has been created by the Canada-Newfoundland Educational Association a committee on which all the provincial governments are directly represented, usually by the deputy ministers, for the purpose of making a comprehensive survey of the deficiencies of Canadian education. I do not want you to misunderstand the word "deficiencies". I am not suggesting that Canadian education is worse than that of any other country, but it is felt that several provinces of the dominion have, during the past twenty years, conducted a large number of educational experiments within their own jurisdictions, and it is notorious that in certain matters each province is perhaps a little ahead of its sisters, and that in view of the tremendous importance of education in the widest possible sense and for the largest possible group of future Canadians we cannot ignore the developments in that field. It is, by the British North America Act, outside of the direct responsibilities of a dominion government, and for that reason the Advisory Committee on Reconstruction is particularly glad that an interprovincial group has itself tackled the problems in that field and has undertaken of its own accord to present its report to the Advisory Committee on Reconstruction so that it may be considered in relation to the other aspects that are under consideration.

There are certain other private committees associated with various industries, but with your consent I will postpone that for a moment or two because it fits in a little better in a later section of what I have to say. These different committees' various reports and studies, to which Mr. Mackenzie has referred, are still going forward. Some of them have been completed since the conclusion of the last session of parliament, and those, Mr. Chairman, will be placed in your hands for the use of the committee as soon as you require them. I would have had them here this morning if my train had been early enough to let me get to my office before coming down here.

One other report I should like to lay before you now is a fairly voluminous report which has been prepared for the committee by its research adviser, Dr. Leonard Marsh, dealing with the whole subject of social security and social legislation throughout the dominion. That subject was at one time considered as appropriate for the creation of a special subcommittee but in view of the fact that the tasks involved are first of all that of very carefully presenting the existing situation in the dominion; secondly, familiarizing oneself with the most recent developments in various other parts of the world; thirdly, suggesting, in the light of contemporary thought and study the way in which the gaps in our existing scheme can be best remedied, it was felt finally that the task was one that could be better undertaken by a man who in his own right is an outstanding expert in the field, with the active advice and assistance of four or five others who were equally expert. The report, which is before you, sir, describes I think more accurately than any other document available the place of social security in the pattern of Canadian society. It analyses carefully the various measures of social security that are now in effect, the distribution of the burdens, and the extent to which they meet a very pressing need of the community. In the third place it suggests some of the problems that have not yet been touched, and in the concluding section it lays down some general principles for the development of an appropriate social security programme for the Dominion of Canada as a whole. It does not suggest at this stage actual rates of contribution or rates of benefit. The Beveridge report, with which I am sure that each of you is familiar at this stage in public discussions, did put forward certain hypothetical rates stated by its author to be pure hypothesis and subject to change, but so much of the discussion since its appearance has dealt with those hypothetical rates rather than with some of the fundamental problems that at the present stage of the discussion it seemed wiser to leave out entirely the question of actual dollars and cents

figures, which are the easiest part of any such report, and concentrate on the task of the framework and organization that is involved in developing an appropriate scheme of social security for Canada.

I want, however, to emphasize the point that Mr. Mackenzie has already made, that social security is, in a sense, a negative part of reconstruction policy. I was this morning reading a report on the train which uses what, to me, is a very descriptive metaphor. It said that social security programmes are exactly like irrigation ditches. If they are well designed and comprehensive they will provide for a flow of water to all those parts of the land where it is needed, and thereby facilitate the maintenance of appropriate crops, but the usefulness of the irrigation ditch is conditioned entirely upon the supply of water available or the water level in the reservoirs that are used. Similarly in the case of social security an appropriate programme will provide for that degree of irrigation of the whole body politic by means of distribution of national income, but its effectiveness is conditioned entirely by the size of that national income, by the constructive and positive steps that are taken in the several fields of economic endeavour to be sure that the total national income produced by the population of Canada using its resources will be sufficient to permit that kind of distribution which attains complete freedom from want and protects the individual against the various hazards of life. The advisory committee, therefore, has been concentrating very largely in the last few months on that problem of maximizing the national income.

As I suggested to you when I was here a year ago it has, from the beginning been the strong feeling of the committee, that all of those tasks which can and will be undertaken by private initiative should be left to private initiative if there is sufficient guarantee of that activity. While we have, therefore, through the construction projects subcommittee, and more recently through the committee on housing and community planning, been exploring carefully the way in which, and the extent to which, the dominion and provincial and municipal governments might engage in what I will call public investment, the building of long term assets under the direct aegis of government and through public expenditure, we have also been encouraging private initiative to itself develop long-range plans that will meet the exact situation.

I don't know how many of you have seen the Lever Report, which became a matter of public discussion on this side of the Atlantic and in Great Britain during the last two or three weeks, but that report to me represents, even though one may not agree with all of its clauses and its recommendations, one of the most significant developments in the thinking of the united nations during the course of the last five or six months. In some respects I think it is more significant than the Beveridge Report itself because for the first time in my experience a private business enterprise has prepared—I don't know by whom because I am at present unaware who actually wrote that report—but it has arranged for the preparation of a comprehensive study of all of the angles of economic reconstruction intergrating the responsibilities of business and government, envisioning more clearly than most business or governmental or private reports the inter-relationship of one country with another, and trying to see the problem as a clear-cut challenge to the co-operation of all those, private and public, having responsibility. I hope, sir, that if the members of the committee have not seen that report it will be possible to obtain a copy so that they may be able to study it.

With that idea in mind various discussions have gone on in this dominion. The pulp and paper industry, which as you know is one of the largest in terms of employment and output, has set up a strong committee to study the reconstruction problems of that particular industry in terms of employment, investment, output and foreign markets. The Cotton Textile Institute has established a similar committee with similar purposes. The heavy industries, iron, steel

and machinery, are at present in process of forming a committee as the result of a large number of discussions that have been going on informally. The life insurance companies that perhaps have fewer immediate post-war problems in their own industry than most other types of business activity have set up a committee on reconstruction which will I hope, because of the limitations of their local domestic problems, rather follow the pattern of Lever Brothers in undertaking some of these fundamental studies, statistical and otherwise, which will need to be made in Canada and which have not yet been undertaken by the Dominion Bureau of Statistics or any of the other committees that have naturally had their attention concentrated on more immediate problems.

It is possible too that there may develop in Canada entirely apart from the Advisory Committee on Reconstruction an organization corresponding to the Committee on Economic Development in the United States under the chairmanship of Mr. Paul Hoffman, a group voluntarily organized by business enterprises for the purpose of encouraging and assisting each business in exploration of its own problems. That has been discussed, I have heard, and I have been participating in various of the discussions concerning it, but it has not yet actually crystallized.

In the field of private initiative then, as in the field of provincial government, to which Mr. Mackenzie referred in his statement a few moments ago, there is a growing recognition of the fact that the solution of reconstruction problems will constitute just as great a challenge in this dominion as the solution of the problems of wartime mobilization constituted in 1940 and 1941. Advance preparation is necessary in every field if satisfactory solutions are to be found; and willingness to undertake that preparation at the present time for the purpose of developing solutions and patterns which can be co-ordinated one with another, inside government and outside government towards the development of a complete program which will adequately meet the conditions in the immediate post-war period and lay the foundation for a long-run future development.

I think, Mr. Chairman, that summarizes what I have to say and if there are questions on that point I shall try to answer them.

The CHAIRMAN: Gentlemen, you have heard Dr. James' statement and I now throw the meeting open to questions. I should like to suggest that we do as we did last year and have each member make his questions brief and not ask too many questions so that other members will have an opportunity as well. There is not much time before us, but the meeting is now open for questions.

*By Mr. MacNicol:*

Q. I should like to ask Dr. James a question, Mr. Chairman, through you. Has the committee of manufacturers to which he referred been set up?—A. No, sir. There are at the present time, as I said, informal discussions, but there is no formal organization as yet.

Q. I must say a word there. I am convinced that is an important committee. They at least will have a fairly practical knowledge of what can be done and what should be done as far as plants and machinery are concerned. That is the point that has been worrying me more than anything else, the lack of really practical ordinary men, men who have actually with their hands and heads made the wheels turn in industry and have provided jobs. I am encouraged by the fact that such a committee is going to be set up. At this stage I was going to say a word with regard to the minister's statement, but it has slipped my mind.

The CHAIRMAN: It will come back again. Are there any further questions or remarks by members of the committee?

*By Mr. Quelch:*

Q. There is one question I should like to ask Dr. James. Dr. James, you referred to a number of programs that had been put forward for post-war reconstruction by various organizations. You did not, however, refer to the report of the London Chamber of Commerce on the general principles of post-war economy, published May 12, 1942. Now, Dr. James, no doubt you are familiar with that report. I was wondering whether you would be prepared to say that generally speaking you are in support of the proposals put forth by that authority?—

A. I'm afraid, Mr. Chairman, I do not recall the details of that report. There were, as you no doubt know, twelve or fifteen of these reports that have come along from the various groups; so that I cannot say that I am in favour of that particular one without recalling it to my mind. My feeling about most of the reports that have come out of England is that they tend on the whole to be much too pessimistic. They are much more concerned—I am talking about the reports of the findings of groups such as the London Chamber of Commerce, the Federation of British Industries, the Lancaster Cotton Exchange, and so on—all of those to me are much too pessimistic, in the sense that they are suggesting defensive organizations. There is a very heavy stress on cartelization of industry: undue stress on tariff protection of an enhanced kind; a great feeling of pessimism about the future of world trade. Now, if I am wrong in remembering all of these features as possibly relating to the report of the London Chamber of Commerce I will try to discuss that in greater detail on another occasion. Just at the moment the detail of it has gone from my mind.

Q. I do not think Dr. James' criticism is quite fair so far as the report of the London Chamber of Commerce is concerned. I would say that their proposals are anything but pessimistic. I have a number of copies. I would be glad to supply Dr. James with one. They are quite brief. I would like to hear his comment on it at some time.

The CHAIRMAN: Are there any further questions for Dr. James? We still have a few minutes.

*By Mr. Castleden:*

Q. Dr. James reported what he calls private initiative preparing for progress, and making advance preparations by way of what they call satisfactory solutions. I do not know what is meant by that entirely. He mentioned the pulp and paper industry, the textile industry, the steel mill industry and the life insurance companies. I would like to know whether any large farm organizations, or labour organizations have been doing any work in the field of reconstruction, or the preparation of reports and recommendations to any of these committees?—A. That is comparatively easy to answer, if you will let me make a general answer; but I will supply the actual names and details if the committee wishes them later. And, by the way, Mr. Chairman, if there are further questions that the committee wishes to ask me at a later time, of course, I will be very glad to come and answer them. The labour organizations are naturally working through the subcommittee on Employment Opportunities; and I may say, sir, that the building trades industry under Mr. Bruce, on behalf of his associates and after considerable discussion, have submitted a report which is at the moment confidential, naturally, which is to be collated with a similar report by Mr. Riley, representing the construction industry, for the purpose of trying to work out satisfactory patterns for the recruitment and employment and definition of labour in that very important and complex industry. That sort of thing is going on.

In the field of agriculture, I think there is scarcely an agricultural organization in the Dominion that has not submitted a fairly substantial brief. These briefs have been considered. Some of them have been acted on in the sense of the report going up from the main committee to the cabinet. Some are still under consideration.

The fact that I referred to what I called the private initiative groups, was not to suggest that they are the only ones who are working, but because in that field we have not set up a subcommittee to the Advisory Committee on Reconstruction. Our main committee decided very early that the tasks confronting the aluminum industry in Canada were completely different from those confronting the railways or, let us say, the chemical industry or, again, from those confronting the airplane or automobile construction industry; and that either we would have to set up a large number of separate committees or else we would have to ask the industries themselves to set up committees and submit their reports to us, not promising any agreement. We might disagree, certainly; but at least we would be sure that this report would be prepared by people with all the facts in the field of employment opportunity for labour.

Then, in the field of agriculture, the agriculture of Quebec is, of course, quite different from that of Saskatchewan, and that of Saskatchewan is in turn quite different from that of British Columbia. But there are certain basic problems arising out of the use of soils and they depend in essence on the relationship and importance of agricultural products to food, first of all; and secondly to industry. And, also, the government has in the past and still is conducting a great deal of investigation in the agricultural experimental stations and through the Department of Agriculture. It was easier, therefore, for the committee to get to work in the way it has; and at a later meeting of this committee, sir, we will present to you, as I have already suggested, several reports that have been made. One of the experts of our committee has recently completed a very comprehensive survey of agricultural research development in the field of hegemony in the United States; others have been studying the subject of marketing, and others have been studying the question of finance.

I trust that clears up the point you raised.

*By Mr. MacNicol:*

Q. Now, Mr. Chairman, the question I wanted to ask a short time ago has come back to my mind. I was greatly pleased by the statement which the minister read, in the course of which he quoted someone as saying that in the interim following the war, industry as a class would be expected to take up a lot of slack, and that while industry is retooling and getting its plants re-equipped to the point where they left off when the war began, the government would have to initiate a programme of works. Now, my question is this, and perhaps Dr. James would be good enough to answer it: is his committee compiling a list of necessary government works that may be gone on with? By that I mean *seriatim*—works project number one, works project number two and so forth; sound economic projects with which the government might proceed during the interval while industry is retooling?—A. The strict answer to that is “no,” sir. My committee is not organized for that purpose. It is not staffed for the purpose of compiling an elaborate list of that kind. We have, however, taken two steps towards the editorials that were cited, and with which we agree.

We are at present working on the details of a proposal for the Dominion government as to the creation of a body which would take specific care of that detail of checking and amassing programmes. Secondly, we have encouraged the development in many parts of the Dominion of local groups. There is one, for instance—and a very active one—in Fort William. There is another very active one in the city of Vancouver. One has now come into being in Toronto, and I was told only yesterday that one is on the point of coming into existence in Montreal. In Halifax there is a committee on which the government of Nova Scotia is represented. Each of these groups, in its own community, is doing precisely what you suggest. They are listing the construction projects that they would like to see carried out in their order of priority, with very careful analyses

as to the number of men that will be required with various types of skill, the quantities of raw material, and also the very significant question of whether they are going to pay for them wholly or whether they can pay only a part or whether they cannot pay anything at all. So that there will be a priority of employment, a priority of social need and also a priority of finance worked out, I hope, for the whole of the Dominion within not too many more months.

Mr. MacNICOL: That answers my question, and it is a very satisfactory answer.

*By Mrs. Nielsen:*

Q. I believe Dr. James mentioned the fact that there was a report made by Lever Brothers. Is that part of the well-known Lever combine which is subsidized in Europe and Germany?—A. Yes.

Q. It is the same?—A. Yes.

*By Mr. Castleden:*

Q. I have one other question with regard to education, in view of your statement with regard to the importance of this matter. I noticed that you said there is a study being made by the various educational departments of Canada and by that Canadian Educational Conference. Are you not advised that this group might study something with regard to the educational opportunities and facilities outside of Canada; that is, that they might enlarge the scope of what they might recommend, make a study of that, and also call in, for assistance on a larger study of the programme, the various teacher organizations, both provincial and federal? It seems to me that the setup to make a study of this is scarcely comprehensive enough in its scope or in its present organization. It should take in some of these other teacher organizations which have already made studies not only of the Canadian scene but also of the scene in other countries.—A. I am very glad you asked that question, because I apparently did not make myself clear. The study is being undertaken by the Canada-Newfoundland Education Association, and I emphasized the fact that all the provincial governments were part of the association, because I was thinking of the British North America Act; also a part of that are all Canadian universities, all Canadian teacher associations, and even representatives of the home and school associations. The committee which is actually making this study, the small subcommittee that is doing the actual work, has on it not only deputy ministers of education, but it has on it a representative of school teachers' association and of the home and teachers association and also a representative of Canadian universities. It happens to be Dr. McKenzie of New Brunswick. So that all of these have been brought into the discussion as completely as one can working with a small committee. The report, of course, will go back to the convention of the association and there you have—at least, it has been the case at the two conventions I have attended—between six hundred and eight hundred people ranging all the way from rural teachers up through high school principals, officials from the Departments of Education and members of universities. So that that point is clearly met.

The second point, as to whether they should extend their studies outside of Canada may perhaps provide grounds for difference of opinion. My own feeling agrees completely with that of the president of the C.N.E.A., that such extension is not necessary because there is already available a whole cabinet of reports from the Bureau of Education in the United States. There is nothing about American education, from the most conservative school to the most modern, which you cannot put your finger on simply by going to the bookcase and looking up the reports of the Bureau of Education. There are two comprehensive reports from Great Britain put out by the president of the Board of Education. There is also, from Great Britain, a report on education put out

by a special committee of the Liberal party and another one, as you might imagine, completely different, put out by a special committee of the Conservative party. Mr. Laskey is writing or editing a third one which is put out by a special committee of the Labour party. So far as the United States and Canada are concerned, from which we inherit much of our educational traditions, that information is already available. Whether it would be worthwhile in the present state of world affairs to study educational development in any other country since 1939, I am not sure. Personally, I think there is little that we can learn. So far as conditions before 1939 are concerned, I think there is very little that we do not know from available reports and articles about educational conditions in every country of Europe; certainly as to Scandinavia, France, Germany and Russia. I do not think that the South American countries or the Far East have very much to teach us. As I say, that is a matter of opinion. I simply want to indicate that a lot of the material which you would like to have brought into focus is already in focus without making a separate new study to rehash it.

The CHAIRMAN: Gentlemen, I want to report to you that I have set up the following as members of the steering committee: Myself, Mr. McNiven, Mr. MacNicol, Mr. Jean, Mr. Hill, Mr. Gillis and Mr. Quelch. That is the same committee as last year with the exception that Mr. Hill from New Brunswick takes the place of Mr. Macmillan from Prince Edward Island. I have taken the liberty of speaking unofficially to two or three groups—I thought of it when you mentioned labour groups a while ago—a labour group and the Canadian Legion and the Canadian Chamber of Commerce, suggesting that at some convenient time they might appear before us and give evidence, but I will take those matters up at the first meeting of the steering committee. Are there any other questions? If not, I suggest that we adjourn for lunch.

The committee adjourned at 1 p.m. to meet at the call of the chair.







SESSION 1943  
HOUSE OF COMMONS

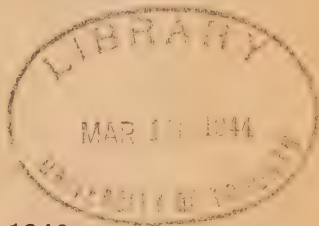
( SPECIAL COMMITTEE )

ON

( RECONSTRUCTION AND RE-ESTABLISHMENT )

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 2



WEDNESDAY, MARCH 17, 1943

WITNESS:

Dr. F. W. Gray, Assistant General Manager, Dominion Steel and Coal Corporation, Sydney, Cape Breton.

OTTAWA  
EDMOND CLOUTIER  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1943



## MINUTES OF PROCEEDINGS

WEDNESDAY, March 17, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11 o'clock, a.m. Mr. J. G. Turgeon, the Chairman, presided.

The following members were present: Messrs. Bertrand (*Prescott*), Black (*Cumberland*), Castleden, Eudes, Ferron, Gershaw, Gillis, Gray, Hill, Jean, Mackenzie (*Vancouver Centre*), MacNicol, McKinnon (*Kenora-Rainy River*), McNiven, Marshall, Martin, Matthews, Mitchell, Nielsen, Mrs., Purdy, Quelch, Sanderson, Turgeon and Tustin.—24.

Mr. F. G. Neate of the Administration Branch of the Wartime Prices and Trade Board was in attendance.

The chairman stated that the subject to be considered to-day would be the coal production of Nova Scotia which was dealt with to some extent last year by Mr. Neate.

Mr. Gershaw moved that the calling of Dr. F. W. Gray as a witness to-day be approved. Carried.

Dr. F. W. Gray, Assistant General Manager of the Dominion Steel and Coal Corporation, Sydney, Cape Breton, was called, examined and retired.

It was agreed that Dr. F. W. Gray and Mr. F. G. Neate would be the witnesses at the next meeting.

The Committee adjourned at 1 o'clock, p.m., to meet again on Thursday, March 18, at 11 o'clock, a.m.

J. P. DOYLE,  
*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

MARCH 17, 1943.

The Select Committee on Reconstruction and Re-establishment met this day at 11 o'clock a.m. The Chairman, Mr. James Gray Turgeon, presided.

The CHAIRMAN: Ladies and gentlemen, we have a quorum and I would ask the committee to come to order. The witness to-day is Dr. Gray, who is assistant general manager of the Dominion Steel and Coal Company and associated companies in Nova Scotia.

Just so that we will not get away from the scheme of things that is before the committee, as chairman I want to say one word concerning what took place last year and why Dr. Gray is here to-day on invitation from the committee. You will remember that last session we had Mr. Neate, from the Fuel Controller's body, giving us evidence on coal from Nova Scotia and what would happen to coal in the post-war years. The question came up concerning the length of life of the coal deposits in that province. Coal in Nova Scotia, as you know, is closely allied to a very large part of the economic and social life of that province. We are here to-day, with Dr. Gray, to deal not with the war production or the war energies, but with what will be the situation confronting Canada and the people of Nova Scotia when the war is over, with particular reference to the possibilities or the probabilities of those men who have enlisted in the armed forces or who have gone into the merchant navy, securing work again when they return to Nova Scotia.

I am now going to call on Dr. Gray, unless some member of the committee has a question to ask.

Mr. GERSHAW: We are, of course, very glad to have Dr. Gray here. I am sure he will give us much valuable information. But just in order to regularize the proceedings, I would move that we, as a committee, ratify the calling of Dr. Gray before us.

The CHAIRMAN: Mr. Gershaw has moved that the committee ratify the calling of Dr. Gray before the committee. Are you ready for the question? All those in favour?

The motion was agreed to.

Now I present Dr. Gray to you. He will give us a statement and when he is through he will be subject to questioning in the ordinary way. I know that he will have a very courteous hearing.

Dr. W. F. GRAY, Assistant General Manager of the Dominion Steel and Coal Company, Sydney, Nova Scotia, called.

The WITNESS: Mr. Chairman and gentlemen, my evidence is chiefly related to the question of coal resources in Nova Scotia and the length of time that they might be expected to last. The major resource there is the submarine field off Sydney. That is, by long odds, the most important piece of coal in Canada, I think. Its importance is out of proportion, possibly, to its size. This arises, in the first instance, from its geographical location and the quality of the coal, which is a coking coal. It is the only important deposit of true coking coal east of probably the Rocky Mountains. Also factors in its importance are its metallurgical quality, its high calorific value which will run around

14,000 B.T.U's, its situation on the Gulf, its connection with the iron ore of Wabana for making steel. All of that gives it unusual importance; and although compared, say, with the resources of Alberta, in quantity they might appear smaller, yet since the beginning of coal mining in Canada the Nova Scotia field produced, first of all, 100 per cent of Canadian coal and is even yet producing in the neighbourhood of nearly half, or 48 per cent. I think Nova Scotia is producing somewhere in the neighbourhood of about 8 million tons out of about 18 million short tons. I am used to talking of long tons and I get confused. So that even yet, notwithstanding the larger coal resources of the west, Nova Scotia is still most important, and very important in connection with its geographical proximity to the large centres of population in Canada, such as Montreal and all those cities that are along the Gulf of St. Lawrence.

I do not think that all the coal is really known in the Cumberland area. But at the mines that my company operate at Spring Hill I think there is coal enough to produce, at about the present rates of output, for another forty years and possibly for a long time after that; but there is an assured output for at least the next forty years.

Pictou county is in a little different category. The Pictou county field is small. It is only about two miles long by half a mile wide, and the seams are not so easily mined as they are in Cape Breton. Then in Cape Breton the coal fields in Inverness county are not operating on a very large scale at the moment because, in some cases they have been unprofitable and in some cases they have not yet been fully tackled. So that brings you back to the Sydney submarine coal field, and that is very, very important.

I and my boy, who is a geologist, made a very close study of that field. We spent together probably about eight years on the study, and I came to the conclusion that in the Sydney coal field we can produce at about the same rate of output for the next, say, 180 years. That takes into account the question of mining submarine coal and the changes of quality and the persistence in the seams. I think that district offers a possibility of mining, say, five million long tons of coal a year over almost two hundred years. So from the point of view of post-war reconstruction there is no question about the resources, at least so far as Cape Breton is concerned, and more particularly the Sydney coal field.

That, I think, Mr. Turgeon, covers in a brief way the resources end of the situation.

The CHAIRMAN: Would you like to have some questions on that before you pass to another phase?

The WITNESS: Yes. The question that I think was chiefly before you last summer was that question of the coal resources.

Mr. MacNICOL: Yes. That was it.

The CHAIRMAN: We are now ready for questioning, gentlemen. May I make one suggestion, Mr. MacNicol, before you rise. In order that all members may have an equal opportunity of asking questions, I would suggest that no one member take up too much time with too many questions at the beginning.

Mr. MacNICOL: I have no comment to make on that question. My recollection is that last year we were informed in this committee that the Nova Scotia fields were just about extinct, that they were extending some three miles or more under the sea, and that, as far as the gentleman who gave information here was concerned, they were through. So I am very glad to hear Dr. Gray say that they have still about two hundred years of life at the rate of five million tons a year.

The CHAIRMAN: Are there any further questions.

Mr. GILLIS: Mr. Chairman, if Mr. MacNicol understood that the question before the committee at the last session and the reason why Dr. Gray or representatives of the Dominion Steel and Coal Company were requested to come here to-day was because of the coal on the island of Cape Breton or in Nova Scotia generally running out, I think he is in error. That was not the question. The question that I raised in committee was the folding up of the industry that is now operating, not as to the resources as they exist under ground. Dr. Gray's statements with respect to the resources are correct, as I have heard them, and I am in agreement with him. But the question we are faced with, and that this committee will have to consider, is the possibilities of the operating companies in Nova Scotia being able to provide employment in the aftermath of the war for the men who will return. I said at that time, and I reiterate it now, that as far as the mines that are operating are concerned, they are on the wane, that new openings will have to be made, that new methods of mining will have to be adopted in Nova Scotia if that industry is to function in the future and market coal in Canada. I reiterate that statement now.

To support that statement I have a short analysis of the mines now operating in that province. I received it through the executive board of the United Mine Workers. It was secured from the headquarters of Dominion Steel and Coal, and it bears out my statement at that time, namely, that the mines now operating are not going to provide employment for anyone in the aftermath of the war, as there is a definite shrinkage in production and in the number of men employed. This statement sets out that the number of men employed at the Dominion Coal Company in 1938 was 9,500 producing 19,000 tons of coal per day. That was in 1938. The number of men employed in 1942 by the same company was 8,000.

The CHAIRMAN: When was it that there were 8,000 employed? Was that 1942?

Mr. GILLIS: Yes, 1942. This is December, 1942. So in that particular company there are 1,500 men less employed there now than there were in 1938. The number of tons per day produced in 1942 was 12,000. There are 7,000 tons of coal per day less produced there than there was in 1938. The number of men employed at the Old Sydney Collieries in 1938 was 1,800, producing 3,000 tons per day. The number of men employed in 1942 is 1,400, with 2,400 tons per day. There is a shrinkage of 600 tons per day in that particular colliery, and 400 men less employed in that particular company. All other mines in Nova Scotia are working with a reduced staff and a much lower tonnage. The membership of the mine workers at present is a little over 10,000. New mines started operation at Gardiner and No. 18, New Waterford. Dr. Gray can tell us as to what the possibilities are in those particular new openings. They closed down since 1938 a mine at Reserve that employed between 400 and 500 men; the Bras d'Or Colliery was closed, Inverness and some sections in Acadia; Tom pit at Sydney mines. Mechanized equipment is being placed in some of the mines and will be increased in the future. That is a brief statement of the operating collieries in Nova Scotia. The question that I raised at that time was not the future of coal with respect to what is in the ground, but the gradual closing down of collieries now operating. What we will have to be concerned about as far as that particular industry is concerned—and that is a basic industry in that province—is to see to it that we are able to take care of the men who are enlisting now and leaving jobs. There are hundreds of boys, as Dr. Gray knows, enlisting from those colliery areas who have never had a job, and who will be coming back to those areas. The natural place to expect employment for them is in, and around those mines. From my own personal

knowledge of the industry in Nova Scotia—that is, the operating industry—what we will have to be concerned about is what we are going to be able to do there when these men return. From that statement there, and it is fairly well up to date, there is a definite shrinkage. The mines are not developing. They are not taking on new men. The reverse is true. There is a gradual closing off of them, because they are old openings. What I had in mind when I asked for some of the representatives of the coal company to come here, was to have them put their plans on the table of this committee, as we are charged with the responsibility of working out rehabilitation plans, and to let us know what it proposes to do with respect to the development of the resources that Dr. Gray says are in the ground. No one else can do it. They have the leases. Under our present order of society, the responsibility is theirs. What do they propose to do with respect to markets in the future? The industry has been largely operating because of the goodness of the heart of the government in the past by way of subsidies, subventions and so forth.

I noticed Mr. Howe last evening in making a statement on the general fuel situation in the House stated that American coal is now going as far east as Riviere du Loup, that the market that was considered an economic market for the coal of Nova Scotia in the past has been gradually been taken from us by American coal. We lost that market in the last war. It took many years and a lot of money to regain it. The same development is taking place now, and I would like to know—and I think this committee should know—just what the coal company proposes with respect to new openings, what we can expect by way of markets. Are they giving up that Quebec market now because of the war emergency with some understanding that market will be restored when the war is over, or are we being put in the position that we were in after the last war with the loss of that market and the taxpayers of Canada having to buy that market back again as we did after the last war? It is matters of that kind that I expected to deal with, not by Dr. Gray, because he is a geologist. The statement that he made is in his own field. The man that I think should have been here before this committee is Mr. Kelley, men who have the marketing of the coal and the general operations and know something with respect to the company's plans in the future in creating employment in that industry for men who are coming back.

I think the evidence is now concrete that we are getting a shrinkage. There are fewer men employed and it is not because of enlistments. That story does not go over with me because I know the industry from the practical viewpoint. I know these mines. I know the men and I am in touch with them. I do not think there is any shortage of practical miners in that province. I think it is because the mines are old, they are gradually drawing their pillars and they are folding them up, and the salvation of that industry in the future is new openings with new methods of mining and with due regard to the market we are handing over now because of the war emergency being handed over with some agreement with respect to its restoration after the war is over.

The CHAIRMAN: May I first point out that Dr. Gray is assistant general manager of the company. He may be a geologist but he is assistant general manager of the company. So far as I remember his name is the only name that was mentioned in any discussions we had concerning who should be called here to speak to us representing the company. Is it the pleasure of the committee that we should ask Dr. Gray to answer some of the questions asked by Mr. Gillis? I think that would be the best course.

The WITNESS: I agree with two points Mr. Gillis has made. One is that the output is declining, and the other is on the necessity and the value to the coal trade in the building up of subventions, and anything that has happened during the war will, I think, merely increase the necessity for subventions after

the war, but I cannot follow Mr. Gillis in his explanation of the decrease. The decrease is entirely and completely a matter of enlistment. I suppose we have lost from the collieries of the Dominion Steel and Coal Corporation, which include Sydney and Sydney Mine, Stellarton and Acadia, probably, 2,000, and maybe rather more, men from the mines.

*By Hon. Mr. Mackenzie:*

Q. Out of how many all together?—A. Out of about 7,000 to 8,000—oh no, for the corporation it would be about 12,000.

*By Mr. MacNicol:*

Q. You have lost 2,000 out of 12,000.—A. Yes, at least, but it is not the loss of men, it is the discriminating character of the men who have enlisted. The bulk of them, at least half of them, are skilled miners, miners who work at the face, who either dig, shoot or load coal.

In a colliery we divide the men into two classes, producers and non-producers. The producers are the men who put the coal on the conveyer belt or into the mine cars. They dig the coal. They are the only men who produce anything. The rest of the employees handle the coal. They take it through the roads and prepare it on the bankhead. They look after ventilation, roads, timber, and a thousand and one things underground that require what we call shift men's duties, but you could have all kinds of shift men as we have now, and you would not get the coal if your miners went away. I think we have lost about 700 miners, real miners, men with certificates. Under the Mines Act a miner has to spend so long a time underground learning his trade, and then he has to be certificated. The certificates usually differ in the various provinces, but in Nova Scotia they call approximately for two years work in and around the face before a man can get his first-class papers.

When the war started about the summer of 1939, the Dominion Coal Company were getting an average daily output of possibly 18,000 to 18,500 tons a day. That output to-day is reduced to around 12,500 tons. That is, there has been a loss in production of around 6,000 tons a day which is entirely due to the withdrawal of men by enlistment. There are a few men, not an important number, who have gone into local war industries. They are building a naval training camp near Sydney, and a few tradesmen such as carpenters have left the mine for that work, but very few skilled coal diggers.

I was on an advisory committee here last June called by the fuel controller on the question of manpower and what we could do at that time to prevent this decline in output and increase it. The committee recommended that the enlistment of miners, the withdrawal of miners for the armed forces should stop and also that miners should be returned from the armed forces to the mines as has been found necessary in England; otherwise that condition would go from bad to worse. Recently the military authorities have released a number of men, and we hope for a little assistance, which will be important with regard to the number of men released. To date we have not got any of those men back but we understand some of them are on the way.

Every coal digger produces about 6 tons per man per day. If you take the per ton per man per day figure over all, you will get at the present time somewhere around two tons, which means that you have to carry sufficient men to take away the work of the 6 ton per day man, and that brings it down to over all two tons per man.

I have brought some figures with me which show that in the year 1939 we had 7,221 men just at the Dominion Coal Company mines, and the miner was getting 6.7 tons per man that year, and overall 2.41 tons per man. That is nearly 2½ tons. In 1942 that figure had dropped to 6.3 tons per miner and

2.1 overall. At this time it is probably not more than 6 tons per miner and a little bit under 2 tons overall. The reason for that decline in the production of the miner is the larger proportion of older men that are left by the withdrawal of younger men and the proportion of younger men that have come in who have not got the experience, and in some cases have not got the physical strength because they are too young to do the work of the skilled miner.

All that has nothing whatever to do with the effort of the company. The company's mines are still in a position to produce as much coal as they ever did. They could produce the same output to-day that they produced in 1939 if we had the men back. It would take a little adjustment. As Mr. Gillis knows some mines' development has been restricted. They have not gone ahead in the way that they should. There is new mine No. 25, new mine in the Harbour seam that we call No. 2C, the new mine at No. 1B in the Harbour seam in which a tunnel was recently completed; that has not been able to go ahead and we cannot go ahead because we have not got the miners. It would take a little adjustment; if we were offered all the men who had gone away tomorrow we probably could not take them all at once. We could only take them in the proportion that the miners came back, but so far as mechanical equipment is concerned, hoist equipment, power stations, ventilation and everything else, we stand ready to produce as much coal to-morrow as we did in 1939, and we will be tickled to death to be able to do so. I admit that the company is suffering, but the country is suffering I think even more. The output of the Dominion Collieries, of which I can speak most accurately, is down about 20,000 tons a week compared to only a year ago. The decline in the number of men was most marked after the middle of the year, after June, and it had something to do in June with the temporary lack of work due to lack of shipping which I think this committee interested itself in. That was overcome, and there is not restriction of output now by means of disposal, and has not been for some time, but the main enlistments that did the real damage took place around the middle of the year. It is rather curious that was not peculiar to Nova Scotia. It happened in Alberta and British Columbia. I cannot speak about Saskatchewan, but in the months from January to say May the collieries were doing relatively well compared to what they are doing now. The origin of the decline in output is the lack of men, and more specifically the lack of miners.

*By Hon. Mr. Mackenzie:*

Q. May I ask two questions with the committee's consent? As I understand it there are three main factors, first of all the question of man-power, or skilled man-power?—A. Yes.

Q. Secondly, opportunities for distribution of your material on markets?—A. Yes.

Q. And thirdly, the raw material; those are the three essential factors?—A. Yes.

Q. And your statement is that at the present moment the question of man-power is the vital factor in regard to your output?—A. It is the factor.

Q. The second question is this: supposing the war were over to-morrow, and you have had a certain amount of man-power at work there, say in 1938 or early in 1939, how long would it take you, with all possible encouragement in regard to markets and other encouragements, to develop or produce say a greater man-power in the coal industry in Nova Scotia?—A. A greater man-power?

Q. Yes.—A. I do not think that there would be any greater man-power required or used than was before the war. That was the peak. The peak of the Nova Scotia output possibly passed in 1913, but we are in a position

where we can continue indefinitely to maintain about the present rate of output. There is not going to be any spectacular enlargement of coal mining; in fact, in some districts in Nova Scotia, like Inverness County, Pictou and Joggins, it is a question of diminishing resources; but they are of no importance except locally, of course, on a proportionate scale to the big coal field of Sydney.

*By Hon. Mr. Mitchell:*

Q. Why do you use 1913 as the peak year?—A. I think the Dominion Coal Company got 4½ million tons in that year, which is more than their present production.

Q. Why should it drop after that?—A. It was a peak all over the world, the coal industry all over the world except in Asia, and that had something to do with politics; it has never come back to the figures of 1913.

*By Hon. Mr. Mackenzie:*

Q. To what extent is your normal development being retarded by any factors you know of?—A. Not much as yet.

*By Mr. McKinnon:*

Q. I do not quite get that clear. You have resources at the present rate of output in the Sydney field to last for 180 years. You are unable to see where the employment of man-power can be increased after the war even with other assistance that you get with regard to subventions and extended markets. Why could you not employ more people if you have that tremendous field there and you have markets for your coal under favourable conditions?—A. Yes. That is a question of the nature of the deposit. The main deposit there is submarine and its access is limited, that is, the frontage on which you can sink new mines. The bulk of the land coal has been mined out. They have been mining coal down in that field for 130 years and mining quite substantially. There never was very much coal on the land relatively, the bulk of it is at sea. I have brought a map with me which I would be glad to show you if it is the wish of the committee.

*By the Chairman:*

Q. Mr. Gray, with the committee's consent may I ask you one question to clear up a doubt in my mind and probably the same doubt in the minds of the members of the committee? Did I understand you to say in answer to Mr. Mackenzie's question, provided you got all the help that Mr. McKinnon points out, the employment that you could reach would not be greater than the number you now employ or would not be greater than the number you were employing immediately before the war?—A. Immediately before the war.

Q. I wanted to make that clear.—A. I might show you—

*By Mr. McNiven:*

Q. That is because of the peculiar nature of your undertaking under the sea?—A. Yes, and also because in any workmanlike or prudent operation of large natural coal resources you try to get a coal crop like a timber limit. You could go into the Sydney coal field and by spending an enormous sum of money increase your output temporarily, but you would damage the field from the long range point of view. I have some figures here that show—

Q. In 1913 when you were at your peak where were you shipping your coal?—A. Chiefly to Montreal and the steel plant.

Q. Were there any subventions at that time?—A. Not in 1913, no. I have a table here which goes back to 1893, that is, the year the Dominion Coal Com-

pany was incorporated. This happens to be the fiftieth anniversary of that company's incorporation. At that time they had seven collieries and they were getting about 800,000 tons in the year. We have had as high as seventeen collieries; in the year 1913 we had seventeen collieries which produced  $4\frac{1}{2}$  million tons that year. To-day we have ten collieries which could, if they had the men, produce just about that amount over a long period. Take the year 1893; we had an output of a little under a million tons; in 1942 we had an output of 3,850,000 tons, and a capacity of about one million tons more than that, and it is capacity one should take, because the present production is a war casualty, it is a matter of man-power and has nothing whatever to do with the condition of the mine.

The fifty years' average was 3,146,000 tons. Now, that is not a bad record of administration of a large resource. The policy of the company has been to operate its mines—being submarine—in such a way that they would not jeopardize the ability to mine coal at sea by anything that took place off the shore. They have had to lay their plans over many years, and they have at the present time a capacity, say, of between  $4\frac{1}{2}$  million and 5 million tons a year, and they could hold that capacity indefinitely given the men and given the markets.

*By Hon. Mr. Mackenzie:*

Q. May I interrupt you there for a moment? We in this committee are charged with looking after the re-establishment of our men after the war. You told us a few moments ago that 2,000 of your men had enlisted in the armed forces of the Crown.—A. Yes.

Q. What I should like to know from the point of view of re-establishment is this: Have you made any plans at all, have you any committee in your organization at all to deal with re-establishment of the miners who come back to reabsorb them in your company?—A. Yes, we expect them to come back.

Q. Do they know that?—A. Yes, I think so.

Q. That is a very important question not only in your industry but in every industry throughout Canada.—A. Is not that a sort of tacit understanding with every company?

Q. Yes. I was wondering if you had made any special plans in regard to it.—A. Except we intend to stay in business.

Q. And take them back?—A. We can, yes, certainly. I might say that—

*By Mr. MacNicol:*

Q. And others, too, if you get more business?—A. Get more business, yes.

*By the Chairman:*

Q. If those enlisted men came back to-morrow could your operations take care of them, the men who have enlisted from the mines?—A. There would be a lag of a few months, maybe, before we could comfortably take them back.

Q. You would take them all back in a few months, maybe?—A. Yes.

*By Hon. Mr. Mitchell:*

Q. You do not ship any further than Moncton now, do you?—A. Moncton?

Q. Yes.—A. Mr. Neate could explain that. We would ship much further if we had the coal and the transportation to do it. At the moment the Canadian National Railway requirements and the steel company requirements and bunkers and local uses have pretty well absorbed the coal. The need in Nova Scotia and the Maritimes requires all the coal we produce. Now, at this time of the year it has been our custom to put down a bank of coal. We would normally have had about perhaps 500,000 tons of coal in the bank, which was in storage for next season's navigation. We have no coal in bank at all.

Q. Following on Mr. Mackenzie's question where he asked you if you had any committee set up in your organization or in your company looking towards what I might say is a furthering of markets after the completion of the war so that you can take up the slack and re-employ those 2,000 men that Mr. Mackenzie speaks of—A. We would hope to regain the markets that we have temporarily lost. I think Mr. Neate's evidence before this committee last year pretty well covered that. I am not prepared to talk about markets and the question of freight rates, subventions and so on, but we hope to get the markets we had. At one time before the war we were selling our coal as far west as International Nickel at Copper Cliff, Noranda, and west of Toronto.

*By Mr. McNiven:*

Q. That was with subvention?—A. Yes.

*By Mr. Hill:*

Q. The answer is, given the markets you will re-employ the men?—A. Our need at the close of this war has got to be markets.

Q. If you are given the markets you will employ the men?—A. Yes.

*By Mr. Quelch:*

Q. There is another point I do not understand. Mr. Gray said the life of the mines was 180 years at the present rate of working?—A. Yes.

Q. And then he was asked whether or not if after the war markets were available and any necessary assistance given would it be possible to increase the employment above the pre-war figure, and I think he replied he did not think so.—A. Yes.

Q. Surely that can be done if you increase your workings, increase the openings?—A. No; I think you will have to admit that there is a limit to the resources.

Q. To the what?—A. To the resources.

Q. You mean to say instead of lasting 180 years they would only last 140 years if you increased the rate of production; otherwise what would damage it?—A. Well, it is a matter of access.

Q. If you increased your openings you would have greater access.

MR. BLACK: I think Dr. Gray had better show the committee the map.

The CHAIRMAN: I should like you to ask that question later. Perhaps we will get a little explanation now.

The WITNESS: This is the map, but it is a long way from you and I do not know whether you will see it or not. This is a map of the Sydney coal field and between boundaries it probably is 40 miles wide. The land coal is pretty well exhausted; for all practical purposes there is no coal left in the land.

*By Mr. MacNicol:*

Q. In all the mines?—A. Yes, in all the mines.

Q. Then there would be no new openings on the land?—A. In the Sydney coal field, any new openings there would be on the land; but I will try to explain that. At the present time there are seven collieries along the coast; there used to be a larger number, there used to be twelve collieries along the coast; but the workings at sea have been merged, consolidated. Now we have in the waterfront about four workable seams; there are more seams but there are four that have been worked, commercially workable at this time. The coal seams are laid down in a shallow trough, very shallow, but the coal grows in swamps, the vegetation grows in swamps, and the swamp started as a small one and grew, spread out over the old land surface like a creeping bog or a

creeping swamp. And, of course, that kept on for millions of years. But that is how it happened; that is the result; that the lowest seam in the field is the smallest; and the seam above when the swamp started to grow—what the geologists call the progressive overlap cover a large area; and the next one is still bigger, and so on. The top seam of all is the biggest of all, had the widest circumference and was the widest in area. Now, in this coal field here at Sydney the lowest seam extends about possibly eight miles and the seam above that extends about twenty miles, and the seam above that extends about twenty five miles and the seam above that perhaps thirty-five miles. And there are more seams over Glace Bay than there are over Sydney.

Mr. McKINNON: Do you mean thirty-five miles under the sea?

The WITNESS: No, thirty-five miles wide (in diameter). For instance, if you had a nest of saucers—something like this (indicating)—say you had a dinner plate, a dessert plate and a bread and butter plate and then you reversed them so that the big plate would be on top that would represent the top seam, and the small plate, the bread and butter plate, would be the bottom seam. That is the way it grew. Now, for the slope, it is always going outwards. That limits the access. These collieries because of that natural condition are largely located in the central part.

And now, that—I think I said twelve—that number of collieries has in the course of time been reduced to six or seven; and some day when we are not here I suppose it may come down to two or three; because you cannot afford too many openings or too many roads.

Now, here is a case over here at Glace Bay formerly worked by four collieries which is now being worked by two collieries in two seams. Over here (at Glace Bay) we have three seams we are working, upper, middle and lower. At another point (indicating) we have four collieries working in one seam. And now, by this method of consolidation we are reducing it to three collieries in two seams and eventually in three seams in coal pits like that (indicating an angle of four to five degrees) so that we drive a main road into each of the successive seams instead of going down straight; and in that way you save a lot of cost in respect to haulage, power and so on—we cut through. And in that way we catch one seam after the other and join them all up and make one road through two or three seams, instead of going down on each seam. And, in this particular case here, (New Waterford) we used to have four sets of roads which had to be kept up and ventilated and so on and we now have two. So the question of access is related to your shore line, your resources at sea, the extent to which those resources can be used and made to yield coal at the minimum cost over a maximum period of time. In the use of this method which I attempted to describe just now—the method of consolidation of collieries—you have fewer collieries but they will be bigger producers each.

In 1913 we had seventeen collieries and the average production per colliery was 208,000 tons per year, about 1,100 tons per day. Now we have ten collieries, which is a reduction of seven, with the same output capacity—not the same actual output, but that is what it is meant for—with a capacity per colliery of 308,000 tons per year instead of 208,000 tons. That is 100,000 tons per year more per colliery, and a daily output of 1,500 tons instead of 1,100. Your collieries are fewer in number and they are producing a greater daily output; and out of the ten collieries you will produce as much coal as you did out of the seventeen. And there is a saving in cost because that is why it is done. And it is only that saving in cost that has made the mining enterprise able to continue. It is not mass production exactly; it is rather different from that; it is more improved mechanical methods and the question of access of approach.

The CHAIRMAN: Dr. Gray, when you were producing 1,100 tons a day from the seventeen collieries were you working to capacity, more or less?

The WITNESS: Yes, that was in 1913, that was one of the peak years.

Hon. Mr. MITCHELL: What is the difference in man-power between 1913 and the date about which you were speaking.

The WITNESS: In 1913 we had 6,270 men.

Hon. Mr. MITCHELL: Yes, what is it now?

The WITNESS: In 1939 we had 7,200. That is an increase in man-power. There has been an increase in man-power because of the increasing difficulties, the increasing differences in bringing the coal.

Hon. Mr. MITCHELL: Then I suppose there will be an increase in mechanization.

The WITNESS: There was a big increase in mechanization, yes.

Hon. Mr. MITCHELL: My point is this; it is not altogether a question of condensation; it is rather a question of man-power and mechanization that is affecting it.

The WITNESS: Yes, you have improved haulage facilities on your main roads. You can afford, for example, to put more money into your main haulage lines than you could under former conditions.

Hon. Mr. MITCHELL: You made an observation a little while ago about policy with respect to mining, that something depended on the distance off shore. What did you mean by that? I take it that you were referring to marine mines?

The WITNESS: Yes.

Hon. Mr. MITCHELL: Mr. Mackenzie asked you a question about the increased man-power and you said that submarine mining would be affected by conditions off shore. What do you mean by off shore?

Mr. HILL: What distance does it go under the sea?

Hon. Mr. MITCHELL: No, that is not my point.

The WITNESS: I think what I meant there was shore conditions, conditions of access.

Hon. Mr. MITCHELL: Oh, I see.

Hon. Mr. MACKENZIE: You also had in mind the haulage and transportation, I suppose.

The WITNESS: For instance, there is a large fringe of twenty-two miles according to the map which gives access to the coal seam, but the field is forty miles wide and you could only get into that forty miles in the central twenty in this end (indicating); and take this point here, if you were to enter there you would only have one seam, while over here you would have two, over here you would have three, and over here you might have four. You see, the effect of these overlapping seams, as I explained to you a little while ago, is such that if you were to enter the top seam at a point say here (indicating), the lower seams are not present in that area.

The CHAIRMAN: Is the coal in the lower seams of a better quality than that in the upper seams?

The WITNESS: No, rather the other way. The lower the coal seam as a rule the coarser the grade. There is also another incidental fact which providence, I think, arranged; that is the top seam, which is the shallowest, can be followed the farthest under the sea before the depth of strata cover gets too much. Also, there is more of it than there is in the other seams, in the lower seams. And, now, the lowest seam is about, I would say, 1,000 feet down at the point here where it passes under the shore line. It could not be followed out to sea as far as the other seams for it is not there. It does not go to sea very far.

Mr. MacNICOL: What fixes that?

The WITNESS: I suppose an act of providence.

The CHAIRMAN: Have you any questions on this phase of proceedings, Mr. Gillis?

Mr. GILLIS: Perhaps I better let Dr. Gray continue. I cannot agree with him that the shrinkage is due to man-power exclusively with the knowledge I have of these collieries.

*By Mr. Gillis:*

Q. For example, you closed Reserve mine—that is number ten?—A. The coal is all gone, yes.

Q. It is closed. It was a producing factor in 1939 and employed around 400 or 500 men?—A. Yes.

Q. At one time about half the men were employed at Reserve and then you open up your number 18 colliery there; and in addition to that transportation was a factor which had a bearing on production; you had to transport the men backwards and forwards and during the winter season that is a rather difficult problem. Consequently number 11 colliery, as you know, is progressively closing. There has been a constant fight for the last three years to keep number 11 open.—A. Yes, it is thinning down.

Q. And it employed some 900. I think there were 250 less on the payroll of that colliery at the end of 1941 than there had been in 1939. That was not caused by enlistments because they were being sent to other collieries in that area before that. And these men are not going back to the colliery. I see number 11 colliery within the next few years being out of the picture.—A. Oh, yes, that is right.

Q. And there is no one coming back to employment in the future there. Now with respect to number two colliery, that was one of the biggest producers of the Dominion Coal Company. That meant they were producing in 1938 around 4,000 tons per shift. It was a big producer. It is doing nothing today but extracting the pillars. Probably the output of that colliery to-day is only about 1,000 tons.—A. Yes.

Q. That is another one that is going out of the picture. The Harbour seam was developed to replace it?—A. Yes.

Q. But the Harbour Seam will not replace the output of No. 2 colliery and it will not take the number of men that colliery employed. If it takes half of them I would say it would do very well.—A. Not very far off.

Q. It has certainly not lived up to expectations, to date anyway. You are having a lot of trouble with bumps and so forth. Personally, you know something about that motor road, the main artery that colliery depends on. I am not so sure of that motor road. It is heaving, and that causes them difficulty. Those are things we have to look forward to.—A. They are bringing about 1,500 tons a day over it.

Q. I know, but they are having great difficulty in holding the roof up. I was in there not so long ago, and they had packed it.

The CHAIRMAN: Do you mind if we get that clear, Mr. Gillis? I want to find what Dr. Gray's response is to that, just to have it on the record. Are you accepting that, Dr. Gray?

The WITNESS: No. As far as that motor road is concerned, there is a little weakness in the strata, but that can be remedied. We see no reason to expect that it will not stand up indefinitely.

*By Mr. Gillis:*

Q. It is an unexpected difficulty. The point I am making is that Harbour Seam is not going to replace No. 2, either by output or by employment of men. At least I do not think so. I am talking about operating collieries in the future. No. 24, as you know, has not a face, and the life of that mine is not so

great. It is a surface mine. I have not any great expectation for employment in the future in No. 24 colliery. I think the reverse is true, and that there will not be as many employed in the future. Princess is an old colliery, and we cannot expect Princess in the future to give employment.—A. Princess is doing better than it ever did in its life.

Q. I have no doubt about that. Nevertheless, it is an old mine. Your transportation is long, and conditions are not so good. That is peculiar to all old mines. I am thinking about the men who have left and gone overseas, and the thousands of boys that never had a job but who will be coming back to Nova Scotia. What I think the committee here is trying to do is to see to it that conditions are not left as they were when war broke out, with the terrific unemployment situation that existed around those collieries. It is our intention to try to remedy that in the future, and to find out just exactly how far the coal company will go to assist in that, so that the committee can determine what other projects are necessary in that province to take up the slack that they may not be able to take care of. Florence is in a similar position. It is an old mine. There will be a lot of boys coming back to that area who never had a job, plus the men who had jobs. You made a statement that they could maintain the present output for some considerable time. That definitely tells us that we would have to work on something else with respect to employment when these men start to come back. I should like to know if the company has any plan with respect to new openings—Thorborn, for example. There is a community of perhaps four hundred people in there now. It has been wiped out. A lot of the men have enlisted from there. They will be coming back and they just do not want to live out there in Thorborn in a wilderness. There is an excellent seam of coal there.—A. Thorborn is another story. That is in Acadia.

Q. Yes.—A. That is not in this field at all.

Q. Mr. Black will know about the possibilities in Spring Hill. The Allen shaft is not a good operation. It is old, and it is a powder keg. It has eruptions every once in a while. You will lose that in time. The whole mining industry in that province, as I understand it, from its present operations, does not hold out very much for the future with respect to employment. That is the thing I want to get clear in my mind and clear in the minds of members of the committee, so that we can go forward with something else in that province with respect to employment when the war is over.—A. Mr. Gillis, there is a difference—and I think it is a difference—between stability and expansion. I would say, speaking broadly, that the great day of expansion of the coal industry in Nova Scotia passed possibly twenty or thirty years ago; but we have arrived now at, I will not call it a static conditions but a position of stability so far as technical direction is concerned. The question of markets is another story. But so far as the technical engineering side of it is concerned, I do not think the mines were ever in as good shape, particularly around the Sydney coal fields, as they are to-day. So far as Princess is concerned—that is this colliery here (indicating on map)—it has an enormous potential of coal in front of it, and the same with the Waterford colliery. Their future is all in front of them. The access behind has been secured. It is something like an army in its lines of communication. We spent enormous sums of money building up those lines of communication to reach the coal face at sea.

Q. We cannot look forward to Princess absorbing all the men coming back from the war.—A. I think Princess can absorb any men who have left Princess.

*By the Chairman:*

Q. How many left Princess? Do you know that?—A. I could not tell you that exactly. I have not got that figure with me.

*By Hon. Mr. Mackenzie:*

Q. Did I understand you aright to say that your summation of the situation there was that of the 2,000 men who have left your employment to go overseas, with reasonable market conditions you could absorb them, not immediately but eventually?—A. Yes.

Q. But you could not go any further in the future by way of any further expansion, than you did before 1938? Is that correct?—A. Yes. Give us the markets we had in 1939, and we will restore the status quo ante bellum.

Q. But you will not go any further?—A. No.

*By Mr. MacNicol:*

Q. I should like to ask Dr. Gray a question there. The committee has heard what Mr. Gillis has said. I want to say that we all respect Mr. Gillis' opinion because he is the only practical coal miner on the committee. He has made the same statements this morning which he made last year, which I have in front of me now, and in which he used the same words. I take it from the words he used that the industry is folding up. What does he mean by "folding up"? Does he mean that the coal business is through in Nova Scotia? He names quite a number of mines. Their names are all here in front of me. They are the same ones he named last year. Does he mean that the whole raft of mines are through, finished, done, when he makes the statement that they are folding up? I understood Dr. Gray to say at the commencement of his statement that there are 180 years of coal deposits ahead for production. Both statements may be correct. I am not finding any fault with what Mr. Gillis says. He ought to know. He has been all through them. You are a principal of the mining corporation and you must know. But I cannot just put those two statements together. When you answer that, I should like to ask one more question and I have only one more to ask. I have been advocating for years in Ontario—and I was one of the first to advocate it and have been a persistent advocate—the use of Nova Scotia coal. I used it myself up until I could not get it. It was good coal.—A. It is good coal, yes.

Q. It was infinitely better than the soft coal rubbish we are getting to-day from the United States.—A. Yes.

Q. That is nothing but rubbish.—A. I am glad to hear you say that.

Q. It takes two tons of coal to get the same amount of heat that I used to get out of one ton of Nova Scotia coal. I personally want to use Nova Scotia coal again as soon as I can. I might say that I use Drumheller Alberta coal too and it is the only coal I can get to-day that is worth a fig. It is good coal. We in Toronto want to use Nova Scotia coal where we use bituminous. We are seized with the truth of the statement that we must buy from Nova Scotia and Alberta if we can, having regard to interprovincial trade. I have been advocating for years that a line of ships should bring Nova Scotia coal to Kingston, Toronto, maybe to Port Hope, Port Stanley, to Goderich, and that coking plants should be erected so that we could use coke too. Last year we were told that Nova Scotia coking coal is very limited; that is, that the coal that is used for coking was very limited. We were told further, if I remember correctly, that it was not good coking coal. It is right here in front of me, but I will not repeat what was said. I understood you to say when you commenced that it was good coking coal.

The CHAIRMAN: It is good coking coal.

*By Mr. MacNicol:*

Q. I think I wrote it down. You said that it is true coking coal.—A. Yes.

Q. If it is true coking coal, I see no reason why, after the war, we cannot have a big coking plant at Port Stanley to supply coke made out of Nova Scotia coal for western Ontario where they use thousands and thousands of tons, with another one perhaps at Goderich or Owen Sound, to take care of that part of Ontario. I am satisfied that people are ready to invest and the government is ready to support any sound, economic plan to bring Nova Scotia coal to Ontario where we use perhaps more coal than any other part of Canada. We use more in Ontario than anywhere else in Canada, do we not?

Mr. NEATE: Yes.

Mr. MacNICOL: Where we are the biggest buyers, and we want to buy from Nova Scotia and Alberta, if Nova Scotia coal will make good coke I see no reason why, after the war and we get back down to business, Ontario could take two, three or four million tons of coal a year from Nova Scotia for its different purposes. We want to help Nova Scotia.

The CHAIRMAN: Mr. MacNicol, I think you have put your finger on a point there with regard to which I should like to make a statement. What you have just said, what Mr. Gillis has been saying, and what Mr. Quelch implied in a question, all sum up to an end rather different to what Dr. Gray has been giving here. Perhaps we could get that out. Mr. Gray, the general trend from Mr. Quelch's question, and from Mr. Gillis' statements and questions, is that no matter what markets may be provided for Nova Scotia coal, you are not in a physical position to produce any greater amount of coal after the war than you were supplying in 1938 and 1939. Is that a correct assumption?—A. In a way. Perhaps I might take the reverse of that. I have some figures here that were given by Mr. Neate.

Mr. MacNICOL: Mr. Chairman, I should like something definite as to whether Nova Scotia coal is good for coking or not.

The CHAIRMAN: Yes. I thought that we would get that other first.

The WITNESS: I have taken the figures for twenty years. Over that whole twenty years, the coal produced for sale, the coal we were able to sell, was less than the capacity of the mines for output. In other words, the capacity of Nova Scotia mines for output has never yet been fully utilized. It is at the moment under stress of war conditions, but under peace-time conditions it has never been fully utilized. During those twenty years the importation of United States bituminous coal into Canada, chiefly into Quebec and Ontario, has averaged in excess of 11 million tons a year. That agrees with what Mr. MacNicol says.

I have a note here about the sales of Nova Scotia coal being continuously below capacity of the mines for output, notwithstanding that during all those years Canada has annually imported a large tonnage of bituminous coal, coal which in every respect, with a few special exceptions, is not any better than Nova Scotia coal. Mr. MacNicol has mentioned something that has become almost a joke with our people. When they cannot get Nova Scotia coal, they say, "When is the time coming when we can get some good dominion coal"? That is a fact. The talk about our coal not being good has more or less been reversed. There are some instances where our Nova Scotia coal, I will not say cannot be used, but it cannot be competitively used. Take Hamilton, the Steel Company of Canada has its own dock and can get coal very cheaply by water from the States; with the cost of sending coal from Sydney and transshipping it, getting it up the lakes from a big boat into a small boat, and putting it on the dock, we could not hope to compete there.

*By Mr. MacNicol:*

Q. Could you if the St. Lawrence sea-way were completed?—A. Yes, if we could take a fair sized vessel through.

Q. It would take ships 600 feet long, 10,000 tonners.—A. I would like to make a point that for 20 years past, and it will be the same after the war, we have never had enough markets in Nova Scotia to work our mines to full capacity.

Q. If we gave you in Ontario a 4,000,000 ton market yearly wouldn't that help the miners in Nova Scotia?—A. Yes; if out of that importation of American coal something like two or three million tons had been thrown our way it would have kept us in full production right along.

*By the Chairman:*

Q. Your mines are still capable of that full production in your opinion?—A. Positively.

Q. And will be for some time?—A. Absolutely.

*By Mr. Quelch:*

Q. That would mean increased employment, would it not, after the war, provided you had this additional market?—A. It would mean increased employment relatively to that 20 years.

Q. Above the 1938 figure, or is that it?—A. Take 1939; we produced four million tons; we could just as easily have produced 4,800,000.

Q. That would mean increased employment then?—A. Yes.

Q. Might I ask this question? The reason, as you have stated before, that with increased markets you do not think you could greatly increase employment after the war is largely due to the fact, is it not, that any increase in coal you might obtain by increased openings would not justify the cost of obtaining that increase? I am not a mine man. I do not understand coal mining. I am probably using the wrong terms.—A. I mean that a very very large capital expenditure on a big increase of output is not the part of wisdom as compared to a steady annual expenditure such as we have made. I took out the figures on that very point. Over ten years I took the figures of the money that we had spent as expenditure on new work. I took the period since 1932, which as everybody knows was the bottom of the depression, and was not a good year for spending money, anyway. I have taken that period to 1942, ten years, and my company has expended in the maintenance of the mines for coal production and in the provision of new mines, in steam electric generating plants, in appliances for pumping and ventilating the mines, and associated services, the sum of \$6,693,000, all over and above ordinary per ton cost of wages and materials used in production.

*By Mr. McKinnon:*

Q. Dr. Gray, you made a statement there that good operating practice would not justify you in making a very heavy capital outlay in opening up new properties; did I understand you correctly?—A. Yes, we had better spend the money in extending our present mines rather than attempt to put up big new mines.

Q. Do you mean that from a return on the investment point of view? Is that what you mean?—A. Partly that, because companies are run for returns on the investment. Mr. Gillis may not agree with that.

Mr. GILLIS: No, I do not. The coal belongs to the people. It should be developed for them.

The WITNESS: Also because you would impair your natural resources; it would be something like a farmer who would work his fields without rotation

of crops. His farm would run down. He would get a good return for a time with very little labour and very little expenditure on fertilizer, but in the end he would have a barren piece of ground.

*By Mr. McKinnon:*

Q. I will put it another way. With that 180 year field you have, suppose you went ahead with that heavy capital expenditure and you were able to provide employment for another three or four thousand men and unload over a shorter term of years. That is, of course, provided that the markets were there?—A. Provided the markets were there.

Q. Would you consider that a justifiable expenditure, and would it be good business from the company's standpoint to go ahead and do it?—A. No, I think it would not. It would be neither good business from the company's standpoint or the country's standpoint. It would not be true conservation of the public resources.

Q. But it would provide employment for another few thousand men for a number of years?—A. Well, it might. It would be a flash in the pan.

Q. What do you mean by that?—A. Say 25 years.

Q. That would not exhaust 180 years supply. Of course, we do not understand this; we are just feeling around to find out where we are at.—A. Let me see if I can elucidate it. There is only one place on this coal field here where a brand new virgin mine could be opened, and that is over here (indicating). Now, all the other collieries would have to proceed to new ground or old territory of old mines. In other words, you have to extend the workings of present mines into new territory all the time. You have mined all the coal here to the shore. There is one mine there that some day might afford the site of a new mine, but that will be done at a time when the output of the other collieries is diminished to the extent that it requires it. If you were to add a new colliery there now—of course during the war you would not have the men anyway, and immediately after the war you might not have the markets; you would have to be assured of the markets, and the extent to which any company can spend money would depend on the extent to which the future of the markets was in sight.

I might follow that \$700,000 a year that I just quoted. That is a total amount of \$6,693,000 in ten years or roughly \$700,000 a year, and it is certain that corresponding outlays will be needed in all the future years.

A mine property is a wasting asset, and you have to be continually making good the breaches in your walls. It is a process of everlastingly spending money in advance development. This is what I have here. If the surplus of sales revenue over the cost of coal sold to consumers does not permit of continuing expenditures on about the scale of the past ten or twelve years then productive capacity will fall, this being a simple statement of the economics of a coal mining enterprise. It is also elementary that the coal company will plan to stay in business and that the record of administration over the past fifty years, the record of expenditure made in maintenance of output capacity, and the existence at this time of as great a potentiality of production of coal as at any time in the company's history are in themselves sufficient example of the provident administration of that field.

I have often thought about this. Many people have asked me if you have large natural resources why wouldn't you go at it and exhaust it quickly and go while the going is good, but the coal fields of Nova Scotia belong to the Crown, to the people of Nova Scotia. I think they are the only case in Canada where that is so.

*By Mr. MacNicol:*

Q. What was that?—A. The coal belongs to the people of Nova Scotia. You see, Nova Scotia early, about 1857, got its own coal resources through what was called the Duke of York's lease.

Q. Has the company to buy from the province?—A. They lease them.

*By Mr. Gillis:*

Q. A 99-year lease?—A. Of which 50 years is gone.

Q. They renew it?—A. That is unique in Canada because the British government has just purchased from the landowners, the landlords, for the sum of something like sixty-three million pounds royalty, the rights which Nova Scotia always had, and the Dominion Coal Company has paid in the 50 years something like \$17 million in coal royalties to the province.

*By Mr. Castleden:*

Q. How much is that per ton?—A. About 12½ cents.

*By Mr. MacNicol:*

Q. The province gets something out of every ton?—A. The province gets 12½ cents. They generally make us an allowance for coal used in colliery consumption, so it works out to a little less than 12½ cents, probably 11·7 cents, but that has been a major source of revenue to the province of Nova Scotia for 50 years.

Q. Will you kindly clear up the question I asked you about the use of Nova Scotia coal to make coke? We were told last year that about 50,000 tons, I think, was the total of coking coal available. That is very limited. The witness said: "I doubt very much if we can get an additional 50,000 tons of coking coal out of those mines." Well, 50,000 tons is not much.

The CHAIRMAN: You are quoting from Mr. Gillis or Mr. Neate?

Hon. Mr. MITCHELL: Mr. Neate.

Mr. MACNICOL: I am quoting from Mr. Neate. I may say, Mr. Chairman, that we all have the very highest opinion of Mr. Neate.

The CHAIRMAN: I wanted to see if that was said by the coal controller or a member of the committee.

Mr. NEATE: I made that statement.

The WITNESS: I think Mr. Neate was speaking of metallurgical coke, which is a matter of sulphur content. The ordinary household coke is much different.

*By Mr. MacNicol:*

Q. Your coal will make the ordinary household coke.—A. Yes.

Q. I am going to ask the committee or somebody connected with the committee to try to give us some concrete information in connection with this. After the war there will be a lot of ships belonging to the government that will either have to be scrapped or allowed to rust out as they did after the last war. There will be many, many boys, Nova Scotia boys, who are now sailing the seas, New Brunswick boys and a lot of boys from the Prairies—the Prairie boys have done marvelous work on the sea. I for one would far sooner see the government either make a present of the ships required to the company or hand them over on some basis that is satisfactory to the people so that ships and sailors, who would be discharged from the navy, could be used to bring Nova Scotia coal up to Ontario. The canals, I believe—I am only speaking from memory now—will take a 258-foot ship. In any event, the Norwegian ships come across the ocean and go up to Chicago. I see no reason why we cannot equip our ships to come up from the salt water

and bring coal with them. If the company can get the ships cheap enough or if the government could hand them over free of charge so that in some way coal could be economically brought up to Ontario in large volume in order to give the miners in Nova Scotia more work and thereby bring the provinces closer together than they are at the present time, it would be a great help. The witness says the coal will make good household coke. There is no reason why a coke plant could not be established at Toronto, Port Stanley, and one at Goderich and perhaps another at Owen Sound and other places along the lakes, and all the by-products that come from the making of coke be used to supply other lines and factories in Ontario, so that the people could get good Canadian coke instead of having to go across the line for it.

*By Hon. Mr. Mitchell:*

Q. What is the differential now between American coking coal laid down in Hamilton, Welland and Goderich?—A. I could not answer that offhand.

Mr. NEATE: Three dollars a ton.

Mrs. NIELSEN: Mr. Chairman, a while ago Dr. Gray mentioned the fact that the mines were well equipped with machinery and so on and that they could continue in production at the same level as that of pre-war years. Recently I have been reading some of the articles of one of our younger Canadian scientists, Dyson Carter. He has written a good deal about a new technological development, new ideas of mining which are in use in the Soviet Union. Some of his articles were really fascinating. I believe he mentioned some instances where they were actually no longer mining coal in some of the large mines, but by a method of slow combustion they were piping off the gas from underneath the surface without ever bringing the coal up. I should like Dr. Gray to give us some idea as to whether or not his company have investigated new methods of mining and whether they have any idea in the future of opening up new mines through the use of new machinery which might possibly replace man labour in the mines. Could you give us any idea as to whether your company has inquired into those ideas at all?

The WITNESS: Yes. Might I before I reply to you, Mrs. Nielsen, speak to Mr. MacNicol's statement with regard to coke? I should like to make this broad statement: there is only one place in Canada where you can supply a coke that is a substitute for anthracite, using Canadian coal, and that is Nova Scotia. If you want a substitute for anthracite, an alternative which is like anthracite, you must use coke, and the only Canadian coke that you can make would be made from Nova Scotia coal, because you could not bring it from the Crow's Nest Pass as it is not a true coking coal out there in the sense that ours is; it does not have the by-products; it is not what they call a fat coal.

Now, Mrs. Nielsen, you asked first of all about that Soviet plan of burning coal in the ground. That really was first of all proposed by an Englishman, Sir John Redmayne, who was for many years chief inspector of mines in England and who came here in 1927 to the International Metallurgical Congress in 1927. I remember seeing him here. That depends on the type of coal seam and the nature of the country and where it exists and the presence of chemical factories or works of some kind who utilize the gases that come off. I think it is chiefly adapted to coal that is pretty dirty, high in ash and probably contorted in the ground, difficult to mine, coal that goes down at a high angle, probably existing in a country that is not much good from an agricultural and climatic point of view. Then, the other question is you would have to put up your works for utilizing by-products, for the utilization of gas for combustion making sulphite of ammonia, toluol and the other elements. You would have to provide that outlet. I think that might be done in a country where you are

a little careless of your natural resources and the country, but I do not see that that could be done anywhere in Canada; it might in some parts of the Rocky Mountains, but not in Nova Scotia. If that were attempted, say, in the Glace Bay district it would probably make the land uninhabitable by setting fire to the coal and everything else, and I think from that point of view it is out of the question, and also it should be understood that there is a good deal of mining involved in that method. You have to mine to let in the fresh air and you have to mine to let out the gases because the fire would put itself out in time by the products of combustion. It is not entirely just setting fire to the coal seam and letting it go; it involves a lot of planning and it is conceivable that there are natural conditions that would advocate that method.

Now, with regard to the Dominion Coal Company I think it is not unjust to say that we have been the pioneers of Canada in the modern use of mining machinery. There are things done in the United States where they have level seams, high seams and non-gaseous seams, where they can utilize big mechanical loading machines. I might say that that particular thought is exercising the English people at this time, and they have American experts over there now seeing if they can adopt American mass production machinery to English conditions. I do not know what progress is being made, but they have sufficiently open minds to try that. But you must remember that the United States is the best provided country with coal resources in the whole world; it has more coal and better coal and more cheaply mined coal than any other part of the world, and they have also been very extravagant and wasteful in the utilization of the coal resources. They have not gone into conservation at all because they have had so much of it. To-day they are not quite as opulent as they have been, and they are thinking along different lines. I doubt if there is anywhere in the United States where they are mining bituminous coal, sir, at a greater depth than a thousand feet and a smaller thickness than three feet. We are glad to get three feet of coal in some of our seams, and we go down to—we have one seam in Springhill which is mining coal at 4,000 feet of cover, probably the deepest cover in America for a coal mine.

I have a note on that particular point. Mr. Gillis made the following statement before the committee last year, quoting from the committee's report:—

In No. 2 mine they are dragging coal six miles from under the Atlantic Ocean. You certainly cannot mine coal in a competitive basis in Canada with operations of that kind, and mechanization is the answer to the problem—mechanization and electrification—if they are to come some regard will have to be made for the men displaced by the machine—mechanization just means unemployment.

Well, now, Mr. Gillis is not quite consistent there. On the one hand he advocates mechanization and electrification, which is the saving of man-power and, on the other hand, he holds forth the necessity of taking care of what I suppose sociologists would call technological unemployment, and there is a little inconsistency in this point of view.

In the district mentioned by Mr. Gillis, that is, the central portion of the Sydney coal seam, advance into the submarine coal seams has been continued for thirty-five years and has reached a distance of about three miles from the shore line.

No. 1-B colliery may be a little farther than three miles, probably three and a half miles, that is, directly out to sea.

During this period the number of men daily employed at all the Dominion collieries has increased by several hundreds of men.

During all this period, however, the use of electricity and of mechanism has progressively increased. It is only by such increased use of electricity underground and by additions to the machines used in haulage, ventilation and coal cutting, that continued employment in coal mining, an increase rather than a decrease in the number of men employed, has been achieved.

The use of electric power by the collieries of the Dominion Coal Company in 1913 was at the rate of  $5\frac{1}{4}$  kilowatt hours per ton of output raised. In 1941 the corresponding figure was  $19\frac{1}{2}$  kilowatt hours per ton, almost quadrupling the 1913 rate of usage.

A condition where less coal is produced by more men using three times the power certainly spells increased cost of production.

But it is equally certain that if the Dominion Coal Company had not invested heavily in new electric-generating plants and in underground electrical equipment, the cost of production would have put an end to coal mining or at any rate drastically reduced the extent of production and the employment which goes with it.

In other words, it is only by the consistent and constant use of the most advanced methods of mining that we have been able to keep our heads above water as the cost of mining increased.

The use of electricity and the extent of mechanical equipment go together. The term "mechanization" is too loosely employed. In its strict sense it is applied to cutting and loading coal at the working faces. The cutting of coal by hand is largely a method of the past, in the Dominion collieries no coal is hand-cut. That leaves only the loading of coal. Mechanical loading is partially achieved by longwall face-belts and conveyors, where instead of loading coal into mine cars the miners shovel it onto a moving conveyor which in turn deposits the coal into mine cars. This mining conveyor-belt goes along the face and the coal is placed on it and it carries it out to the mine cars. Fully mechanized loading of coal is achieved by shovelling machines which feed conveyor belts. Machines of this kind are very large, requiring a level grade in the coal seam, a high coal seam, without dirt bands in the seam, a strong roof and freedom from explosive gases. When all these conditions occur together more coal can be produced with less workers than by manual labour, and some excellent production records have been achieved in the United States and elsewhere where such favourable conditions are found. There are instances in the States where they are getting as much as 30 tons or more per miner employed with these machines. That compares with our 6. It seems an almost incredible record in that way, but they have the conditions.

The coal seams of Nova Scotia have inclined grades; the coal seams here dip anywhere from 5 to 14 degrees. They are nowhere level. The roofs are not strong, requiring much timber for roof support, a condition that progressively increases with increased depth of mining. All the Nova Scotia seams are relatively gaseous. When we mine coal with grass roof covers ranging up to 700 feet the support of the roof is not important, but when you get down to depths like we have of from 900 to 2,000 feet your roof gets heavy. As a matter of fact it gets so heavy that we have had to abandon what is known as the Roman pillar system, where you mine out coal and leave a pillar. So we take all the coal out by what is called the longwall method and let the roof and floor come together. That is the method we are using at the present time. I think that is generally true, that when you get over a thousand feet of cover you get a heavy roof. In many of these mines in the United States they have horizontal seams, high seams, shallow seams with no gas and just a shovelling proposition compared to some of our conditions.

The conditions in Nova Scotia are definitely unfavourable to mechanized mining, especially to the use of mechanical loaders; because of the extent to which timber is required to keep up the roads, and to keep up the roofs and to manœuvre mechanical devices of large dimensions.

The greatest saving of manual effort is possible where electricity can be freely used as a motor power without danger from explosive gas in the mine air. The general use of electricity at the coal-face has not been found advisable in deep mines in Nova Scotia, and use is made of compressed air, generated in electrically-operated air-compressors.

It is possible that the mine-operators in Nova Scotia, and the mining regulations by which they are governed under the Coal Mines Regulation Act, have been conservative in employment of electricity at coal-working faces, but they have good reasons for their caution.

Summarizing this phase of "mechanization" the technical officers of the coal companies hold the opinion that they have progressed in the introduction of labour-saving machines at the coal-face to the present limits of prudence, but will go further when they see advantages to be gained in increased rate of production by so doing, always having safety of men's lives in mind.

There are no precedents for coal-mining under the physical conditions attending the mining of coal in the submarine areas in Nova Scotia. The practice attained has grown out of slowly-gained experience, and under the circumstances, this growth of technical knowledge translated into operating practice must continue. In other words, we have had to learn as we go along.

Mr. Gillis referred to the need to provide employment in Nova Scotia coal mines for "men displaced by the machine." All that needs to be said about this is that over a long period during which every available mechanical device has been used to increase the individual daily output of the workers, the number of workers employed has increased in relation to the coal produced by these workers.

In five years, 1911-1915 inclusive, the figures of men employed relative to coal produced were as follows:—

|                                 | Five-Year<br>Averages |       |
|---------------------------------|-----------------------|-------|
|                                 | 1911-1915             | 1942  |
| No. men employed (men) .....    | 6,170                 | 7,109 |
| <i>Tons Produced</i>            |                       |       |
| Per miner per day (tons) .....  | 6.2                   | 6.3   |
| Per worker per day (tons) ..... | 2.61                  | 2.10  |

The figures for 1942 are shown for comparison in parallel column. Almost 1,000 more men are now employed, notwithstanding the annual tonnage rate in the period 1911-1915 was 4,430,000 tons comparing with 3,800,000 in 1942. Also it should be noted the 1911-1915 average production came from sixteen mines. The 1942 production comes from ten mines.

It must be noted that smaller production per man employed per day is the consequence of the lesser number of men at the face engaged in mining coal, a condition that does not permit corresponding reduction in the number of men engaged in handling and preparation of the coal produced. The number of face-workers who have left the mines for the armed services has been much greater proportionately than those who have gone from the auxiliary forces.

The CHAIRMAN: Dr. Gray, would you pardon me just a moment. It is one o'clock and I think most of the members would like to get away. I know you will understand, Doctor. I would like to suggest that we adjourn now.

Mr. GILLIS: Might I just say this. Probably Dr. Gray will not be with us to-morrow—

The CHAIRMAN: Oh yes, he is going to be here to-morrow. We are going to carry right on to-morrow. I just wanted to say this: I think we are beginning to get some place in our chief study for the utilization and development of natural resources; and particularly with respect to the re-employment of men who have enlisted from Nova Scotia and who have gone into the armed services.

I am going to ask Mr. Neate, the Fuel Controller, if he could be here to-morrow; possibly to act as a key witness with Dr. Gray, who may require him. He tells me he will be here to-morrow.

I want then, on behalf of the committee, to compliment you, Dr. Gray, for the manner in which you have presented your material to us this morning.

The WITNESS: Thank you, Mr. Chairman.

The committee adjourned at 1.00 o'clock p.m. to meet again to-morrow, March 18, 1942, at 11.00 o'clock a.m.











Doc. 1000  
Special Committee on Reconstruction and Re-establishment  
1943/44

SESSION 1943  
HOUSE OF COMMONS

---

SPECIAL COMMITTEE

ON

RECONSTRUCTION AND RE-ESTABLISHMENT

---

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 3

---

THURSDAY, MARCH 18, 1943

---



WITNESSES:

Dr. F. W. Gray, Assistant General Manager, Dominion Steel and Coal Corporation, Sydney, Cape Breton.

Mr. F. G. Neate, Deputy Administrator of Fuel, Wartime Prices and Trade Board, Ottawa.



ORDER OF REFERENCE

WEDNESDAY, March 17, 1943.

*Ordered*,—That the names of Messrs. Bence, Ross (*Calgary East*) and MacKenzie (*Neepawa*) be substituted for those of Messrs. Stirling, Gershaw and Maybank on the said Committee.

Attest.

ARTHUR BEAUCHESNE,  
*Clerk of the House.*



## MINUTES OF PROCEEDINGS

THURSDAY, March 18, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11.00 o'clock a.m. Mr. J. G. Turgeon, the Chairman, presided.

The following members were present: Messrs. Bertrand (*Prescott*), Black (*Cumberland*), Castleden, Eudes, Ferron, Fraser (*Northumberland, Ont.*), Gillis, Gray, Hill, Jean, Mackenzie (*Neepawa*), Mackenzie (*Vancouver Centre*), MacNicol, McDonald (*Pontiac*), McKinnon (*Kenora-Rainy River*), McNiven, Marshall, Martin, Matthews, Mitchell, Nielsen (*Mrs.*), Poirier, Purdy, Ross (*Calgary East*), Ross (*Middlesex East*), Sanderson and Turgeon.—27.

Hon. Ian Mackenzie tabled a copy of Security, Work and Relief Policies, National Resources Planning Board, 1942; also a copy of National Resources Development Report for 1943.

Dr. F. W. Gray, Assistant General Manager, Dominion Steel and Coal Corporation, was recalled, further examined, and retired.

Mr. F. G. Neate, Deputy Administrator of Fuel, Wartime Prices and Trade Board, was called, examined, and retired.

Dr. F. W. Gray was recalled, further examined, and retired.

The Chairman thanked the witnesses for the valuable evidence they submitted.

The Chairman announced that the Subcommittee on Agenda would meet to-night at 8.00 o'clock.

The Committee adjourned at 1.00 o'clock p.m., to meet again at the call of the Chair.

J. P. DOYLE,  
*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

March 18, 1943.

The Select Committee on Reconstruction and Re-Establishment met this day at 11 o'clock a.m. The Chairman, Mr. James Gray Turgeon, presided.

The CHAIRMAN: Ladies and gentlemen, we have a quorum and we are going to continue to-day with Dr. Gray's evidence, and perhaps with a further statement by Mr. Neate of the Fuel Controller's board.

Mr. MACNICOL: I am glad to hear that. I would like to clear up two statements, one that Nova Scotia coal is good for coking and the other that Nova Scotia coal is not good for coking.

The CHAIRMAN: Before I call on Dr. Gray may I announce to members of the committee that Mr. Mackenzie, the minister, has left two reports. They belong to him, but they are for the use of the committee. They are reports of the Natural Resources Planning Board of Washington, and they will be with the clerk of the committee if anybody wants to see them.

DR. W. F. GRAY, *Recalled.*

The WITNESS: Gentlemen, I do not know precisely where I left off but thinking things over there are a couple of points I would like to make that I did not touch on yesterday arising out of something that Mr. Black said in the house on Tuesday with reference to what he called the educational process required in Quebec and Ontario to persuade industries to convert their boilers structurally to use Nova Scotia coal in areas in which up to the time subventions came to the help of the Nova Scotia coal industry nothing had ever been used but American coal. That is, a large part of Ontario for geographical reasons, apart from national reasons, was fuelled from the great coal fields of the United States, and when Nova Scotia coal came in to these localities it had its own characteristics which are largely that it is a long flame coal and it is a little too hot for some boiler settings. I would like to say in reference to something that Mr. MacNicol stated, and I would like to confirm what he said from my personal knowledge, that the people of Ontario, and particularly Toronto, have always been very co-operative and anxious to use Nova Scotia coal. A great many of these structural alterations were made. I could give you the names of people who changed their boilers just to use Nova Scotia coal. When that is done it does not mean that American coal cannot be used again. The structural alterations that are made are in the nature more or less of modernizing, and they burn American coal better when they have them than they did before those changes were made, but nevertheless it enabled them to burn Nova Scotia coal. We would hope when the war is over and these temporarily lost markets come back to Nova Scotia coal—I have no doubt they will—that these people will revert to Nova Scotia coal again when they can get it. I think it would be a constructive suggestion if that policy were widened. There are a number of plants, not only in Ontario but in Quebec, right within the water market of Nova Scotia coal which would not necessarily call for subvention aid, which have combustion equipment that was designed to use American coal, and in many cases by American engineers. If that combustion equipment was altered a little structurally, they could burn Nova Scotia coal. I think as part of post-war rehabilita-

tion it would be good policy on the part of the federal government to have that done, even if it meant some subsidization of such structural alterations. In that way you would create a permanent and dependable market, one which would be based on an economic foundation rather than on an assisted foundation, and I would suggest to you that policy, which has proved so successful, could be considerably widened.

I would like also to mention in regard to post-war conditions that before the war—

*By Mr. Black:*

Q. In addition no new boilers should be made except what comply with those specifications?—A. I would say that would be desirable. I do not know just how it could be accomplished but I think it would be a patriotic thing to have combustion equipment in Canadian territory to use Canadian coal.

*By Mr. McKinnon:*

Q. Right there, Dr. Gray, is it a question of construction of the boilers or the drafting arrangements?—A. It is largely the construction of the boiler settings. There are certain chain grate stokers that our coal is too hot for and the boiler setting needs raising. The alterations are not very serious in some cases.

*By Mr. MacNicol:*

Q. Dr. Gray, if I may interject, the ordinary house boiler requires no structural changes. All it requires is to install a blower, and a blower at all times is a valuable appliance to have in connection with a house boiler. That is all that I use. I have a goodly number of blowers attached to my boilers, and I burn Nova Scotia coal satisfactorily.—A. You burn soft coal?

Q. Soft bituminous coal with a blower; my own residence has two blowers.—A. Your chimneys must have ample capacity in them.

Q. Oh, yes.—A. In many cases the flues are too small. They soot up. That is why coke is so desirable.

Q. I burn straight Nova Scotia coal in my residence, and in other buildings, and I use a blower and I find it very satisfactory.—A. I am glad to hear that.

*By Mr. McKinnon:*

Q. Dr. Gray, did you not just hit the nail on the head there that the real difference between using American anthracite and Nova Scotia coal is that your tubes will plug up? That is one of the reasons?—A. That is true in the domestic arrangement, but not in big industrial establishments. The soot would have some effect, but it is a long flaming coal, and it had competed largely with West Virginia coal which is short flaming. I remember a case in point, going to the buildings of the University of Toronto in Queen's Park. They had boilers that were rather old-fashioned and the boiler settings were low. They were what we call the dutch oven type of boiler and the coal would give the heat but it would burn the settings down. They had similar boilers in Ottawa here in the union station which were designed for American coal and we tried all kinds of things to overcome that, but if the boiler setting had been raised it would have accomplished the object.

Mr. McKINNON: I know I can confirm what Mr. MacNicol has said because in the part of the country that I come from years ago we used nothing but anthracite. Then we got on to Alberta coal and sometimes used wood, but as far as affecting the furnace is concerned we never saw any difference in the anthracite and the Alberta coal as far as atmospheric heat is concerned.

The WITNESS: Alberta coal is another thing. It is a low volatile coal, but its smokelessness is due to its high moisture. Alberta coal will run around 20 per cent moisture, anyway. It is not wet but it is moisture from the coal, and the smoke that comes off is partly steam really, not soot. In Nova Scotia and New Brunswick I suppose that 90 per cent of the people use soft coal for all forms of domestic cooking and heating. A few use coke when they can get it, but the generally approved fuel is soft coal.

*By Mr. McNiven:*

Q. What is the moisture content of your coal?—A. About 2 per cent. That is the inherent moisture. You can only detect it by chemical analysis. It is a very dusty coal. Alberta coal has a high moisture content. That is what makes it slack under atmospheric exposure.

*By Mr. MacNicol:*

Q. If I may interject a word about Alberta coal, I buy it in the lump and at once put it under cover and I find it very satisfactory.—A. If you keep it under cover.

The CHAIRMAN: I do not want to interrupt but it might be well if we got on to some of the larger questions. You have dealt with the question of changed appliances. If we go into it in detail we may never get beyond it.

The WITNESS: I would like to suggest also with regard to oil burning equipment that oil burning has gone out of fashion because of the shortage of petroleum or fuel oil, and many people have had to convert from oil to coal, but after the war in all probability a reversion will take place. I do not know what to suggest about it except that the competition of oil will again become acute after the war. Then there is the increased provision of hydro electric power and its increased use in war industries at the present time which is also requiring people to use coal. There are very big hydro electric developments under foot, some completed, such as the Shipshaw development at Arvida, and no doubt the question of surplus electric power after the war will again reduce the urgency of coal supply.

I am a coal man and, like the cobbler, I think there is nothing like leather, but I think the shortage of coal during war conditions brings us back to the fundamental necessity and the urgency of coal production. Might I suggest with regard to national fuel policy, without using that much misused term in any political sense, that I think the national fuel policy for Canada should be such a fostering of coal production in peacetime as to keep it in a healthy producing condition for wartime. In war coal is one thing you cannot do without. The coal supply may not spell victory, but lack of coal will most certainly spell defeat, and the main reason for a policy that fosters the coal industry in times of peace is that it is probably the most important factor of Canadian national defence and independence. That was the real national reason for the transportation subventions. The ability of the coal mines to produce coal during war has justified every penny that was spent on those subventions, and any failure of production of coal at this time is not due to any lack in the coal industry itself but it is a pure case of lack of manpower. These are a few things that I thought I could add.

*By Mr. Martin:*

Q. You mentioned electric power and oil, but you did not mention the use of gas.—A. You mean natural gas?

Q. Yes, as one of the means of contracting the availability of coal at the end of the war.—A. Yes; there is only one small part of Canada where natural gas is really available, that is in Alberta.

Q. Well, western Ontario?—A. Yes, but—

Q. Tremendous.—A. It is, but I think you will find the use of gas not a very great competitor of coal.

Q. It certainly is in western Ontario.—A. In Hamilton don't you mix it with coal gas?

Q. I was thinking of the Windsor district as far as Thamesville, that whole area uses a tremendous amount of gas.—A. We use a little gas in Moncton; in Nova Scotia we wish we had more because it is a very nice fuel, but I do not think it is a major factor as a competitor of coal and it is not increasing, is it, in Ontario, the rock pressure is not increasing?

The CHAIRMAN: Have you any further questions?

*By Mr. Purdy:*

Q. Can you tell us about how many average days per week the miners are working at this time, each man?—A. Yes; that is a difficult question to answer. The mines are working six days a week.

Q. Yes, but the individual man, how many days per week does he work?—A. That is a matter of individual habit; some men will work six days, some men will work five days, and some will work four days. That depends altogether on the man, his type, his physical ability and desire to work; but all the mines are working six days a week except at Sydney mines. They have not worked on Saturday for a long time.

Q. Now, sir, has there been, to your mind, any connection between the falling off in the average production per day per man since June last year when the budget was presented; is there any connection between the two; in other words, has taxation any influence in the falling off of production per man per day?—A. It has had a little effect, it did have before TD-1 was understood. I do not think that it affects many men; it is talked about a good deal and of course any man who earns good money, enough money to pay income tax, when he finally figures it out he realizes that no matter how his income tax is paid he gets more if his weekly wage is not reduced by the income tax to the extent that it justifies him taking a day off. I do not think in Nova Scotia it has very much effect; it did have for a time. Some people who had not thought matters out went off the handle, but I would not say it was a major factor.

Q. Did I understand you to say yesterday, when quoting Mr. Gillis where he said that you were hauling your coal six miles underground, Dominion No. 2, that in fact you were hauling it a little more than three?—A. Yes, we are hauling—you must understand a mine goes to sea, and our mines are nearly all submarine, and they are, I might say, like a ribbon unfolding. The mine goes down the centre and you might be three—I think the furthest extent we have gone seaward, direct from the shore, is three and three-quarter miles at one point, but then you have to go sideways; also the deeps, as we call them, enter the mine, go down on an inclination to the sea, like down this paper; but then you go along to your workings on the level and in some cases you have to go up hill again to bring the coal down to the level, along the level to the deep to the main hauls or shaft to the end of the slope, and there are places where our coal might have to go six or seven miles from the face to its final destination..

Q. That is not general; there are a few instances?—A. Oh, yes; that is one of the difficulties of big mines, but the haulage in every case is as efficient as it can be made.

Q. I wanted to get straightened out on the distance. I thought there was some question about it. I understood you to say three and three-quarter miles and Mr. Gillis to say six. I thought that was the furthest out.—A. It depends on the colliery. One of our oldest collieries, which has been operating since before confederation through the same shaft, goes probably three and one-half

miles to the end of the deep and a mile and a half at least along the level. Well, that coal has to be brought that distance. Other mines are much shallower. The lowest seam, the Emery, would have much less distance to travel. In the Waterford area the extent seawards is about two miles down the deep, but then you have to go sideways on the level, as we call it, to get the coal.

*By the Chairman:*

Q. Is your means of conveyance right up to date?—A. Absolutely, yes. Of course, we not only ride our coal out, but we ride our men in and out to the extent that is possible.

*By Mr. Ross (Calgary East):*

Q. I understood you to say one of your mines has not been operating for some time on Saturdays.—A. Sydney mines, yes.

Q. Does that apply to one mine?—A. Two mines.

Q. What is the reason it does not operate six days a week?—A. I do not know; they think five days a week are enough.

Q. Is that the men or the operators?—A. The men.

*By Mr. McKinnon:*

Q. Would it be a fair assumption to make to say that there is this six days' work available for the men if they wish to work six days a week?—A. At this time, yes.

*By Mr. Ross (Calgary East):*

Q. Does that apply to the two mines that have not been operating six days a week as well?—A. Oh, yes; our mines are producing to the full extent of their capacity. The bottleneck is man-power; another bottleneck, of course, is the extent to which the man-power works. The efficiency of the men, that is, more particularly the miners, has been reduced because, as I think I explained yesterday, there are old men among them. The better men have been taken away and there are younger and less experienced men. I would say that the individual miner is doing his best according to his ability, but you cannot take out of the mines a large number of physically able men and have your general average kept up to the same extent.

The CHAIRMAN: Any further questions?

*By Mr. Purdy:*

Q. You would say this, if the miners could be persuaded or would work six days a week, as they do in other industries, you would be getting out more coal with the same man-power?—A. Oh, yes, there is no question about that?

*By Hon. Mr. Mitchell:*

Q. Is there any overtime rate for the sixth day in the agreement in those two mines?—A. No, no overtime rates for the sixth day.

Q. In those two mines you speak of?—A. No, not for the sixth day.

Q. In the United States there is time and a half for the sixth day where five days a week is worked.—A. No, not in Nova Scotia.

*By Mr. Martin:*

Q. What about Alberta on that score?—A. No, not in Alberta at all.

Q. Not in Canada at all?—A. No. I might perhaps elaborate a little on the question of absenteeism, which is a contentious question. In normal times—

*By the Chairman:*

Q. Dr. Gray, does the question of absenteeism that you intend to deal with have any bearing on the post-war period or is that purely— —A. No.

Q. If it has nothing to do with the post-war period then I think we should let it go for the time being, especially if it has nothing to do with post-war directly or indirectly.—A. All I wanted to say on the question was—

Mr. GRAY: We certainly have dealt with far more than post-war. I think this witness ought to be permitted to continue.

The CHAIRMAN: I did not want to get into a long argument about the questions that might arise through absenteeism.

The WITNESS: All I wished to say was this: when your force is reduced, when you are working with a stripped force with fewer men than you had the absence of one man has a much greater effect than it would have if you had sufficient men. That is where absenteeism becomes probably more acute and more—well, it is serious because of the reduced number of men who are at work. That is all I wish to say on that.

*By Hon. Mr. Mackenzie:*

Q. How are the conditions of health generally of the men in the mines?—A. I think coal mining is not unhealthy. The miner works in relatively fresh air; he does not work excessively long hours. He is in the dark, but I think coal mining as it is conducted to-day is a fairly healthy occupation. If you saw the number of men on our pay-roll over sixty years of age you would realize that it is fairly healthy from a statistical point of view.

*By Mr. McKinnon:*

Q. How many hours a day do they work?—A. The statutory working day is eight hours from bank to bank.

*By Mrs. Nielsen:*

Q. Is there any particular occupational disease connected with coal mining? You spoke about the general health; is there any particular disease which is noticeable?—A. No outstanding—

*By Hon. Mr. Mackenzie:*

Q. Silicosis?—A. No, no.

*By Hon. Mr. Mitchell:*

Q. Are they wet mines?—A. Some of them are wet.

Q. You would not get silicosis there.—A. Some of smaller mine seams are wet, but as a whole our mines are a trifle dry. Silicosis is not a disease usually associated with coal mining, it is a disease of hard rock mining, people working on silica rock. There is a disease in the Old Country, not a disease, that they call nystagmus.

*By Mr. Bertrand:*

Q. Dr. Gray mentioned a moment ago something about the use of coal after the war and suggested probably there would have to be a change of construction of equipment to use Nova Scotia coal, a change that would affect boilers and stokers. He mentioned to this committee the suggestion that the Canadian government would probably be well advised to subsidize the cost of these changes. I was wondering if the company had given any consideration to offer-

ing to pay for these changes after the war, as it would be helpful to them and provide them with a local market. I was wondering to what extent they had made any investigation, because they know who are the prospective customers and who are the industries who would likely use Nova Scotia coal. Of course, it is very easy to pass it on to the government and say the government will always subsidize, but I should like to know to what extent the company has made investigation of that possibility and the cost that would be therein involved, and if it is beyond the reasonable ability of the company to finance probably then it might be suggested that the Canadian government should subsidize, but after all the industries who are looking for markets and looking for outlets should certainly interest themselves to that extent. I wonder if Dr. Gray can tell us if anything has been done by the company in that connection?—A. Yes, we have done a great deal. We have a corps of combustion engineers whose duty it is to deal with that; to keep statistics, and give our customers any assistance they can. We have a combustion engineer in all our districts at the present time. Our chief combustion engineer is lent to the Canadian government to supervise the burning equipment of the Air Force; and he has done very good work on that in the matter of piling coal and in using the type of equipment that is adapted to the district where the airport is situated. There was a little too great a tendency to standardize equipment and get it from one central point, and equipment was probably put into some airports that was not the best suited for local fuel. But since this man has been assisting the Air Force, there has been a considerable improvement in that respect. We ourselves are probably pioneers in the use of combustion equipment. In fact, it is a little difficult to believe, but a large part of the contraction in some of the markets is due to the greater efficiency in the use of burning coal. We have in our Sydney steam plant some of the most modern boilers in the world which produce steam at 720 degrees F. and 420 pounds pressure—that is pretty hot stuff; and these boilers can be converted in twenty minutes from the use of gas—blast furnace gas—to the use of powdered coal. I think I can say that we have followed that problem more than anybody else. I can also say that we have had the steady assistance of the Department of Mines at Ottawa, and also the Department of Mines in Nova Scotia; particularly the Fuel Testing Branch of the department—that I think comes under the Minister of Mines, Dr. Camsell; and throughout many years they have worked with us as to the qualities of our coal and how best to use it; and they have collaborated with us. I can say that we have done a great deal along that line.

Q. Mr. Chairman, might I ask if the cost of this change over of the equipment necessarily is very great?—A. Not necessarily so. In most cases I think the person using the equipment might benefit by taking out his old-fashioned installation and putting new equipment in. He will also benefit to the extent that he will have a dependable source of fuel supply. He would not be dependent upon whether there was a strike in the United States, or whether there was possibly a wet season or a dry season affecting hydro electric output. He would have a source of supply that would be reliable.

*By Mr. Matthews:*

Q. Would you care to say why the men in one mine are working five days a week and in another mine six? There must be some good reason. You might enlighten us on that?—A. Might I say that it is just due to local attitudes. I do not think there is any good reason for it.

*By Mr. MacKenzie (Neepawa):*

Q. How long since your engineer went out?—A. Oh, I think it was some thirty years ago, at least.

Q. I mean to the Air Force?—A. Oh, possibly two years; about that.

The CHAIRMAN: Are there any further questions for Dr. Gray?

Mr. GILLIS: I would like to make a few remarks when Dr. Gray is through. I do not want to interrupt him. I would like to comment on some of the points he has raised, with which I do not exactly agree.

The CHAIRMAN: That would be satisfactory. All right, Mr. Gillis.

Mr. GILLIS: I do not want to question Dr. Gray. He was sent here by the company.

The CHAIRMAN: No, he was not sent here by the company. He is here at the request of the committee.

Mr. GILLIS: He did not run away from them. He was sent here by the company at the request of this committee.

The CHAIRMAN: Oh yes, that is right.

Mr. GILLIS: He is making his representation as a company representative. I happen to be connected with the other side of the picture. Yesterday he quoted me as having said to this committee that in the event of technological developments taking place in the mines of Nova Scotia the men so displaced would have to be taken care of.

The WITNESS: I think I quoted you as saying that.

Mr. GILLIS: Yes, that is what I said; and he construed that as being an inconsistent statement. I think it is absolutely consistent myself. When I was speaking of mechanization and electrification in the future, I was not talking about the old mines that are now operating. I made that clear in answers here to the committee. I know that it is not possible to mechanize them to any greater extent than they are mechanized at the present time, but I was thinking in terms of new development in Nova Scotia; and I just want to make that point clear.

I think, myself, the committee has done a first class job in tackling the problem the way they have tackled it. We have had Dr. James here, and representations from other people who were selected to talk about industry, and so forth, and we have got a presentation as coming directly from the top with very little opportunity on the part of the committee of doing anything they wish about it. What the committee, I think, is doing now, is getting right down to rock bottom; examining the industry from the bottom; and we will get a clear picture in that way as to what our job will be with respect to rehabilitation in that particular industry.

Now, Mrs. Nielsen asked a question with respect to industrial diseases, as to whether there were any diseases peculiar to mining. Dr. Gray said that there wasn't anything in particular. Well, I know that there is. On the question of silicosis; well, it is becoming quite prevalent in Nova Scotia—compensation records will show that. While it is not peculiar to coal mining particularly, the situation in Nova Scotia since 1927 has been such that they started to stone-dust their mines, their working faces, their roadways and everything; and the distribution of that stone-dust creates moisture—no doubt it is a necessary operation—but by the distribution of that stone-dust in 1927 right throughout the mines from the pit mouth to the working faces, the roadways and everywhere else, the result is that every time a man in the mine takes a breath, he is taking in a fifty-fifty mixture of stone dust and coal dust; that is constantly in the air; and as a result the men who are working in the mine are actually breathing in fifty per cent stone dust. And since 1927, particularly in the past five years, there has been a considerable development of silicosis among workers in mines in Nova Scotia. In addition to that there are other diseases. The men who work in coal mines, who are drawing the pillars—take in the Emery mine—there we find these facts, occupational disease; diseases such as bronchitis, silicosis and so on; and we find that most of them are com-

pensable. That is something peculiar to coal mining. I could tell you that you are not working in a coal mine very long with the stress of physical labour necessary to that occupation, before you develop rheumatism with all its allied distresses such as arthritis, neuritis and that sort of thing. I served for ten years on the Benefit Association Board which handled cases from the Glace Bay area particularly; and I know that we had a constant line up of neuritis, rheumatism, incipient development of silicosis—that is all something that is peculiar to the coal miners. While the air is relatively fresh in some sections, in your older mines, in the pillar sections—in No. II and Caledonia—those places are terrible. You work in a sixteen-foot room drawing the pillars—I know them; I did seven years of it—and I know that for six to six and a half hours a day you are working in a place so full of dust that you cannot see your partner's light on the other side of the box from you, the dust is that thick, and that is continuous. There is no current of air there, either, because when you get in where you are extracting your pillars, there is no force to the air flow and it is practically dead and, as a result, your dust is there; and that sets up a bronchial condition before you are at it very long; and, you know you have it. Now, those things are all directly related to the coal mining industry.

Mr. MATTHEWS: How many hours a day would a man spend under conditions such as that?

Mr. GILLIS: He spends six and a half hours at the working face.

With respect to length of hours; no one in any industry in Canada works longer hours than does the miner. You are really on the job from the time you get up until you get back home. That means usually starting around five or five-thirty o'clock in the morning; you travel to the wash-room where you change your clothing; then if you are using powder for blasting you go on to the powder magazine and draw your powder, your explosives with which you are going to work; you get your lamp, and you are on the road, maybe an hour and a half from the time you leave your home until you get to the working face. So I think the real hours the miner works are from five to five-thirty in the morning at least until five-thirty in the evening when he is back again to his home. Those are long hours, hours that you do not have to work in any other industry that I know of. In almost any other industry you can jump on a street-car or take a taxi and reach the factory and start directly on your job; and when your shift is over within ten minutes you can be completely free from your machine.

Now, I did not rise to say that, I wanted to make this point: what I am interested in is the future of that industry with respect to rehabilitation, and Mr. MacNicol made a suggestion yesterday which I think is important; that is, the establishment of coking plants in Ontario that might create a larger market for coal. I think the industry will have to be expanded in Nova Scotia and will undoubtedly have to provide new markets.

With respect to markets I suggest that the first thing you will have to do to improve the coal industry is to extend transportation facilities. I do not think that taking coal by water is the best means of transportation, because the river St. Lawrence is frozen up for three or four months of the year when you cannot ship, and as a result of that you have to bank your coal and when you bank your coal you are adding to the cost of your fuel. I think myself what we will have to do, if we figure on carrying on mining operations, particularly on the island of Cape Breton where a major portion of the industry is situated, we will have to improve our railway facilities on the island of Cape Breton. You will have to take out the curves and lower the grade and perhaps double track your road. However, that is something which can be done in the future. Secondly, I think—we have been talking about it since 1895—that the strait of Canso will either have to be bridged or

tunnelled. I would like to hear from Mr. Neate on that when he is next before us. If that were done you could ship your coal by rail every day of the year. You would not have to depend on banking your coal during the winter months until navigation on the St. Lawrence re-opened. That is something we shall have to do in the future. We should break that bottle-neck, and it has definitely been proven to be a bottle-neck since the outbreak of the war. You are taking the coal now and shipping it to Point deChene, handling it for shipment across the straits and reloading it for shipment to Quebec. That is another reason why I say that something will have to be done about transportation facilities, that they will have to be improved.

Then, there was Mr. MacNicol's idea, having coking plants in Ontario and I think that is a very constructive suggestion.

And, now another thing with respect to marketing coal to which I think we will have to pay attention in the future is the spread in the middle, between the consumer and the producer; and a good example of that is Halifax, you do not have to go out of Nova Scotia.

The provincial government of Nova Scotia took over a mine there some years ago, at Inverness. It was exploited beyond the point of being profitable and so it was taken over. They operate that mine themselves. That coal can be landed in Halifax at least for around \$6.50 a ton. Instead of the provincial government setting up their own marketing organization and marketing their own coal, that coal is handed over to Cunard Limited in Halifax who sell it from \$12 to \$15 a ton. That spread is something we will have to eliminate. The same thing applies to coal in Montreal. Dominion coal is landed in Montreal for \$6.25 a ton; is selling down there from \$12 to \$14 a ton. In the middle there, the government will have to take the responsibility for doing something with respect to the marketing of that coal. That is something that will have to come, assuming of course that we are in earnest about this business of rehabilitation and curing the ills from which we now suffer.

With respect to the question of expansion, I agree with Dr. Gray absolutely that the resources will have to be conserved, with the reallocation of collieries and plants as they are operating now. It was recommended by Sir Andrew Rae Duncan some years ago, and we have discussed it and rediscussed it many times in Nova Scotia.

Mr. MARTIN: That was in 1928?

Mr. GILLIS: Yes. That conservation involved a reallocation of the resources, and they have a development there that will take care of a certain number of people. But Dr. Gray has proven conclusively to me, as far as this committee is concerned, as to the question of rehabilitation, that we cannot look forward to anything there in the present operation for taking care of men returning from overseas.

I think there are three points in Nova Scotia that should be tapped. First, I believe that plans should be made for an opening in the Thorborn area. I believe that an opening there would take care of the problem of unemployment for Pictou county for some time to come as far as the coal industry is concerned. Secondly, on the Island of Cape Breton, I think an opening should be made at Morien.

Mr. MARTIN: Are those openings connected with Dr. Gray's companies?

Mr. GILLIS: Yes.

Mr. MARTIN: Are they submarine?

Mr. GILLIS: Yes. Morien would be submarine and the other point at Mabou would be submarine, but Thorborn would not be.

As Dr. Gray knows, there have been several mines closed within the last fifteen years in the area I mentioned. Thorborn has been closed only recently. In the Morien area, they closed out two collieries at Birch Grove, No. 6 back in 1925. There is a long line of ghost towns on that coast, where the people have a considerable investment in property such as schools, churches and so forth, and they are living there. At the present time they are obliged to leave that area by train and go miles across to Glace Bay and the other collieries. They are on the road practically all the time just getting to and from work. Such an opening as I have mentioned would mean the rehabilitation of communities. It would provide employment in the future, and there is coal there. These points are proven. Otherwise I would not mention that.

Then there is Inverness county, the Mabou area, where there is a good supply of coal. For ten years the whole county of Inverness has been nothing but a relief camp. If we started now and decided that we were going to expand the industry by opening up these three points, I believe it would relieve our minds a whole lot on the question of employment for the future in Nova Scotia.

Then to tackle the transportation problem, as I have mentioned it, I would suggest going into this question of the spread between the consumer and the purchaser, a proper marketing organization set up and the improvement of transportation facilities so that there could be a continuous flow of coal over the railways. I would suggest the use of our roads, and avoid the banking of coal during the winter months. It would take care of some of the costs at least that are added to the fuel now. That is all I have to say on that. I wanted to leave those three points with you so that Mr. Neate, when he speaks—and he is familiar with marketing and so forth—may comment on what I have said.

The CHAIRMAN: Are there any further questions before I call on Mr. Neate?

*By Mrs. Nielsen:*

Q. What would be the estimated cost of making these new openings suggested by Mr. Gillis? Could Dr. Gray give us any idea of the estimated cost of that to the company?—A. Yes. Mr. Gillis said that his criticisms last summer on mechanization referred not to the old mines but to the new mines. That raises the question of new mines. The mines he refers to are, none of them, in the district that I talked more particularly about yesterday, except Morien. At Thorborn there is a seam which was worked on the out-cropping. There is supposed to be, although not definitely proven, a seam of workable coal at depth, and our engineers figured that it would take four years of driving to reach that seam. I have not any figures on the cost, but the cost would be considerable. At the present time, of course, any such operation is entirely out of the question because of lack of man-power. The men at Thorborn, which is an outgrowth of the town of New Glasgow, are all being employed at the present time. There are only a very few who are not, and there is work for them at the Acadia Coal at New Glasgow and Stellarton.

*By Mr. Gillis:*

Q. That means leaving their homes? They are about seven miles out from the Allen shaft.—A. Yes. I would like to comment on that matter, from the point of view of a man who has lived, as a boy, in a mining district which was not submarine. Of course, that is in the old country where transportation is probably a little easier. But the history of coal mining there has been that the colliery closes down and another opens, and the men have to go long distances to their work by bus. I think that is true of most coalfields. In

Cape Breton, particularly in the district of Sydney, there is greater promise of permanence of colliery towns than in any other place I know of, because they are on the shore and they cannot go any further. That is the last foothold. The towns of Glace Bay, Waterford, and Sydney Mines will be going long after we are all gone, because the submarine deposit is at sea and those are the only points of access. It may be that the men will have to travel distances from their present homes. They are doing that now. They are going by train and they are going by bus, and I rather think that that thing is just beginning. But in the Sydney district, because of that peculiar shore frontage arrangement, you are going to have less shifting than in any place that I know of.

With regard to Mabou, that is an unknown condition. There is coal at sea, the geologists think, but that can only be proven by sinking a deep shaft and cross cutting. It is quite conceivable that you might spend some millions of dollars—one estimate that I saw years ago for opening Mabou, under Mr. Tonge, I think was \$5 million—and then might be disappointed. It is a speculative enterprise.

With regard to Inverness, I am afraid that there is not much hope for Inverness because the deposit is exhausted. It is worked out. With regard to Morien, as you know, it is in a deep line, a deep valley, and the coal is very steep on the one side, forty degrees, and relatively shallow on the other. There are places in the Sydney district in which it would pay in the matter of cost, quality and employment, and which would be better suited for a new colliery than Morien. I think that covers the points you mentioned. As regards ghost towns, we have got to go a long way back. Morien was the metropolis of Cape Breton at one time, around 1820 or 1840, I think. That is where they started coal mining, and they tackled the coal where it was most easily accessible. The seam of coal there was nine feet thick, and all they had to do was load it from the cliffs into the schooner. Those days of easy pickings have gone, and the present mining involves long planning and enormous capital expenditures. We are just about starting on that bigger scale of mining. The easily accessible coal was extracted by independent operators since 1825 to the present time.

While I am on my feet, Mr. Chairman, I should like, if I might, to mention stone dusting. I do not think stone dusting, Mr. Gillis, has had any effect on silicosis, because the stone dust we use is limestone and it contains no silica at all.

*By Mr. Gillis:*

Q. We hope it is limestone.—A. It is limestone. It is nothing but limestone. Stone dusting is a statutory obligation.

Q. That is right.—A. And it is probable that next to the safety lamp, it has saved more lives, and been the greatest preventative of coal dust explosions, or explosions in coal mines, that the world has ever seen. Stone dusting may have its unpleasantness, but it certainly does not cause silicosis.

Q. You will admit, Dr. Gray—at least, it has been my experience—that up until stone dusting began or a few years after it began, we never heard at all of silicosis; and I do know now positively that it is quite prevalent among the miners.—A. Well, I only know of two or three cases myself, Mr. Gillis.

Q. Oh, I could name you fifty men who are actually laid up.—A. I can tell you this. You are more liable to get silicosis from riding in a car on the gravel roads in Cape Breton than you are from working in the mines.

*By Hon. Mr. Mitchell:*

Q. Why would it be recognized by the Workmen's Compensation Board as a compensatable disease?—A. It is listed as a compensatable disease.

Q. Would there not be some inquiry into the condition of the men in Nova Scotia before the Workmen's Compensation Board would recognize it as an industrial disease?—A. No. I do not think there was any inquiry. I think it was added to the list.

*By Mr. Gillis:*

Q. Yes, there was, Dr. Gray. It is only a few years ago that it was accepted by the government of Nova Scotia as a compensatable disease, and there was quite a fight with the government to have them extend it.—A. The government was prevailed upon to add it to the list.

*By Mr. MacNicol:*

Q. Why should not the roads be oiled?—A. We hard-surface them now.

Q. You have not the oil now.

*By Mr. Ross:*

Q. This is an industrial disease. It would not be confined to mining. It would arise in other industries.—A. I would say with regard to coal mining that I think I can safely say that coal mining is one of the least liable to silicosis. I might tell Mr. Gillis that years ago, in the old country, it was actually proposed to dust certain silica mines with coal dust.

*By Mr. Gillis:*

Q. Yes, that is true.—A. The effect of silicosis is on the lungs. It causes a roughness in the lung. Coal dust does not do that. Coal dust may give you a black lung, but it will not give you silicosis.

Q. I agree with you, if you are just getting coal dust. The fact of the matter is that they took men down from Kirkland Lake who had it and put them in coal mines thinking it would cure them.—A. There is another thing I think I would like to say. You said that our mines could not take care of the returned men. I can say quite definitely, "Give us the markets and we will take care of all the men who come back."

Q. That is good.

*By the Chairman:*

Q. That is definite?—A. Yes. Give us the markets.

The CHAIRMAN: Then, if we are through for the time being with Dr. Gray I would ask Mr. Neate if he would give us some statement resulting from what took place yesterday and his studies since he was here last session and then answer questions.

Mr. F. G. NEATE, recalled.

The WITNESS: Mr. Chairman and hon. members; if my review of this situation to-day is not as complete as it should be I think the onus must be on the chairman, Mr. Turgeon. Twenty-four hours is rather short notice to appear before a parliamentary committee.

The CHAIRMAN: Not for you.

The WITNESS: I would like to make two or three points with respect to the marketing end which was discussed very fully yesterday. History is repeating itself. Back in 1913 we were pulling two and a half million tons up the St. Lawrence and in 1918 that two million odd tons had decreased to just about 134,000 tons.

*By the Chairman:*

Q. From 2,800,000?—A. About 2,400,000 in 1913. In 1939 we brought 2·3 million tons up the St. Lawrence. This year I doubt if we will bring any up. It took five years from 1918 to bring that Nova Scotia market back to displace American coal which was brought in to that area to serve Quebec. The impact after this war will be considerably more important than it was after the last war, and I will explain why. In 1939 we were producing about fifteen and a half million tons of coal. I am going to deal with bituminous coal because it is the real industrial problem and the one that will more satisfactorily serve industry after the war. From 1939 we have jumped our production from 15·6 million tons to 18 million tons, but our importation of bituminous coal from the United States has increased from 9·8 million tons to 24·7 million tons this year, and we are reaching the limit of our importation from the United States at the present time.

Up till the time the United States entered the war coal was fairly free, but their increased activities demand an enormous amount of coal. Before the war their production was in the neighbourhood of 400 million tons. To-day it has jumped to 600 million tons.

*By Mr. Martin:*

Q. From 400 million to 600 million?—A. Yes. It is going to have a severe effect on the industrial markets of Ontario and Quebec after the war when the American production has to meet a decreased market. You have got a 200 million ton lag. What is going to happen? We had better face the situation now because we will not overcome a 200 million ton lag of production over night. If we can maintain our own production it will mean a considerable ousting of American coal from the Canadian markets. I do not think that is going to happen without a yell. At the present time we are down each year begging and begging for more coal. In 1939 it was 9·8 million tons; in 1940 it was 13·3 million tons; in 1941 it was 16 million tons, and last year it was 19·5 million tons. Now we have to go up to 24·7 million tons.

*By Mr. Black:*

Q. What is that last figure?—A. 24,725,000.

Q. That is for 1943?—A. That is our estimated requirements for this year. As I say there will no doubt be great pressure on industry in this country to maintain American coal in a lot of industries. We have had the utmost goodwill and co-operation or we would not have had this increased tonnage. I think probably it has been good insurance to maintain our contacts in Washington for the past twenty years, and also to have insured ourselves by the system or method of subventions so as to maintain our own mines in a position where they could help us out during these days of stress.

Q. That would have been even more necessary had we not had friendly relations and had the United States as an ally in this war. If they had been unsympathetic with us it would have been more important than we can really see to have as large resources and producing capacity of coal in Canada as possible?—A. That is right. Mr. MacNicol expressed the thought yesterday that by deepening the St. Lawrence, Nova Scotia coal could be more cheaply transported to the Ontario market. That is somewhat in the nature of a double-bitted axe, Mr. MacNicol, for the simple reason that if you could bring large boats up from Sydney in to the Ontario market you could also bring large boats from American ports right in to Montreal and Quebec in competition with our own coal down there.

Mr. MACNICOL: They can go in there right now. I did not mean deepening east of Montreal. We have got that to-day with a 35-foot draft. They do not need any further depth down there.

The WITNESS: That is one of our chief difficulties of pre-war days, the meeting of American competition right in Quebec. In fact, we subsidized Canadian coal going into Quebec city for many years, but I thought I would point that out because it has been a fear expressed by many that if larger boats could go into lake Ontario equally so larger boats could go from American ports down into the St. Lawrence.

*By Mr. Martin:*

Q. Western coal production does not enter into this picture that you have now given us?—A. No, I am going to deal with that after cleaning up this Nova Scotia discussion which was more or less put to me yesterday.

Mr. MacNicol asked a question with regard to the coking qualities of Nova Scotia coal. I think the last time I appeared before this committee I pointed out that the tonnage of coking coal available of metallurgical grade is limited to a certain amount, and that production in normal times is practically all taken up. At the Sydney coke plant, or at Halifax, Quebec or in the large plant in Montreal some additional tonnages might be available but not any quantity. Coke produced from the general run of Nova Scotia coal would not be able to compete with by-product coke imported from the United States nor would it be entirely suitable for the manufacture of gas due to its high sulphur content. Again any coke plants that might be erected in Ontario would have a 400 million ton market to draw on with variable high class gas coals, and I think that any coke oven proprietor would look to the south rather than to the east for coking coals. If it would be of interest to the committee I might suggest that our own metallurgical engineers be called to give evidence on that point, but after some 20 years experimenting at our laboratories we find that certain grades of Nova Scotia coal are ideally suited for the manufacture of coke and gas but, as I say, I think the general run is too high in sulphur and would not produce coke comparable to what is being produced from higher grade coals.

*By Mr. MacNicol:*

Q. The coke that I was talking about was for house heating.—A. It would apply there, Mr. MacNicol, for the same reason. You cannot produce coke unless you can dispose of your gas.

*By Mr. Black:*

Q. What is the percentage of fuel value in gas and coke in Nova Scotia coal?—A. I think I put that statement on the record last year, Mr. Black. I have not the figures in my head but I can easily get them for you, or just refer back to the flow sheet of the Sydney coal plant, producing coke and gas from coal at Sydney, also at Montreal. That is on record.

Mr. BLACK: About what would it be, Dr. Gray?

Dr. GRAY: What is the question?

Mr. BLACK: The fuel value in the gas in comparison with the coke in a coking plant.

Dr. GRAY: I suppose that the gas would run about six or seven hundred B.T.U's.

The WITNESS: I do not think it is that high. I would say it would be in the neighbourhood of 550, but that statement is on record.

The CHAIRMAN: I think that is on record last year.

The WITNESS: If not, I will satisfy Mr. Black by sending it to him.

Mr. MACNICOL: Mr. Chairman, am I wrong in stating that the government is either now erecting or is negotiating with someone to erect a huge gas plant in

Hamilton for the production of gas, and if so, why couldn't gas from our own coal be used instead of importing coal to produce that gas that apparently is required for industrial purposes? The papers have been full of that lately.

The WITNESS: There is a two million dollar addition to the by-product plant at Hamilton going in now under the power controller. That is the Curran Knowles plant, and they are having extreme difficulty at the present time in getting sufficient coal from the United States to run their plant. Of course, at the present time Nova Scotia coal is not available to any extent outside the confines of the Maritime provinces, but after the war naturally there would be an extended market if the coal could be prepared and made suitable for the manufacture of gas. It would entail a heavy subsidy. There is no doubt about that, but the first unit of the Curran Knowles plant came into being about the 15th of February.

*By Mr. MacNicol:*

Q. Is that the same type of plant as at Owen Sound?—A. Yes.

Q. And that they are proposing to erect at Kitchener?—A. Yes. I believe they did negotiate with the Kitchener, and also Waterloo, civic authorities but the same thing applies at Owen Sound. They have been in difficulties for some years due to the price received for their coke and the price they have to pay for the coal.

*By Mr. Gillis:*

Q. While you are on that point did your department have any dealings with a Mr. W. A. Caunt who proposes a low temperature carbonization process?—A. I first met Mr. Caunt in Pittsburgh in March, 1928, and I think yearly up until 1935. We have received correspondence from him, too.

Q. Is there any merit in his proposals?—A. We haven't found any yet. I suggested, however, last week that we send one of our engineers up to make another check to see if there is anything to the proposal or not. Let us find out definitely once and for all.

*By Mr. MacNicol:*

Q. Is that the one that is at Kitchener?—A. Waterloo.

Q. He has been to see me two or three times. I am not a coal man but I am heartily in favour of using Canadian coal in any shape, manner or form.—A. There are many other plants more suitable than that retort to use Canadian coal and I would not think that Mr. Caunt could satisfy anyone that he has something that others have not got. It is really a take-off of the Illingworth retort which was fully investigated and is in operation in Great Britain at several points now.

If the committee will permit me I will just skip over to Vancouver Island and work back eastward. I think I covered Nova Scotia and New Brunswick fairly thoroughly in summarizing that situation on my last two appearances. Vancouver Island is not in a very satisfactory state with respect to coal mining at the present time. Production has dropped in half; from 1,600,000 in the 20's it is down to about 850,000 tons annually now. No. 10 mine will be out within three years. They have commenced drawing the pillars there now. On the other hand, in the Crow's Nest Pass district of British Columbia production is doubled, but we have got to face Vancouver Island's deteriorating situation. Although they still need a couple of hundred men there to keep production anywhere near normal no doubt there may be places for the men now employed there in the Crow's Nest Pass or in other areas in northern British Columbia which are now being developed which would take care of any labour loss due to the reduction of production on the island.

*By Hon. Mr. Mackenzie:*

Q. What is the cause?—A. Petering out.

*By Mr. Ross (Calgary East):*

Q. The mines are petering out?—A. Yes.

*By Mr. MacNicol:*

Q. Becoming exhausted?—A. Yes. There is a bright spot in British Columbia. With the opening up of the vast territories north we are now having developments taking place up at Telkwa.

*By the Chairman:*

Q. Between Prince George and Prince Rupert?—A. To supply the demand for coal coming in now from Prince Rupert, Prince George and north. In the past our movement into Prince Albert was chiefly from the island by water, but the opening up of the Telkwa reserve will give us, I hope this year, in the neighbourhood of 60,000 tons with a possibility of 150,000.

*By Mr. MacNicol:*

Q. How many tons have been taken out in the Bullhead mining area on the Peace river west of Port St. John?—A. I cannot tell you that.

Q. Quite a little?—A. Yes.

Q. The Americans are taking out coal there now.

THE CHAIRMAN: I can tell you that after we finish with what the witness is at.

THE WITNESS: We might hope to reach 150,000 tons at Telkwa. I do not know what further development may be possible, but undoubtedly there will be a greater demand for coal in British Columbia after the war than previous to the war. At the moment, of course, we are in a very difficult position, having to supply probably some 350,000 tons of coal to the American forces and to the contractors on that northern development work, and we have also had to supply a considerable tonnage of coal to the inland markets down there, Spokane and Seattle for their necessary war industries. In fact to-day we more or less have to streamline our consumption and set out to learn to do the most with the least instead of doing the least with the most. That is our position as compared with what it was in the past where we have had plenty; to-day we have not. Our exports from British Columbia, northern Alberta, this year to Alaska and to the Spokane area will probably amount to 800,000 to 900,000 tons.

*By Mr. MacNicol:*

Q. That includes Fort Norman east of— —A. Yes.

Now, to make that export possible we have had to divert Alberta coke that came down far east of the head of the lakes and confine it to the prairie provinces and even probably out of Winnipeg. We have taken over 100,000 tons of Alberta coal to the B.C. coast markets this year to supply the famine demand created by war industries, slowing up of our own production and to meet the requirements of the United States.

Q. May I ask you this, Mr. Neate: you said we had to supply 350,000 tons of coal for the American war effort?—A. Alaska Highway and troops in the camps.

Q. And is Norman included in that?—A. Norman would be included in that.

Q. The Peace River right up— —A. That is right. They are helping themselves to some extent by taking coal from the Utah and Wyoming areas through

Seattle up by boat. In fact since the middle of December they have been taking trainloads of coal from Duluth at the head of the lakes right to Spokane and Seattle, which has meant a tremendous haul. The reason we have been able to help out the west to the extent shown is due entirely to the cooperation of the American producers and Solid Fuel Coordination Committee, who permitted these vast imports of bituminous coal into Ontario, and particularly at the head of the lakes. I anticipate this year we will bring in probably in excess of  $2\frac{1}{2}$  million tons through Port Arthur and Fort William, which will permit, as it is now, American coal being used on the railways as far west as Broadview, Saskatchewan, whereas previous to the war we were moving Alberta coal east as far as Jackfish and I think White River.

Now, the dislocation of the western Canadian markets into the Ontario and western Ontario area will have to be recognized immediately after the war, for the simple reason the western operators have spent considerable money and time developing that outlet for their coal in Ontario. The railways have cooperated to a great extent, the pulp and paper plants cooperated, and the result was that we had over a million-ton market in that area for Alberta coal.

Q. Did I understand you to say you are bringing in  $2\frac{1}{2}$  million tons?—A. From Chicago to the head of the lakes for railway consumption and to some extent for the use of the pulp and paper plants in the north. Now, you see why the Nova Scotia coal is dislocated to the extent of over a million tons, which was the Ontario market, and a further million tons from the western mines out of the Ontario market, all being served with American coal. Now is the time and we are studying the situation to see that these markets are regained by our own operators immediately the coal becomes available. It has been very disappointing particularly—

*By Mr. Martin:*

Q. What steps have been taken?—A. Particularly on a zoning plan to find out just exactly what coal is used in a certain area and blocking out that area to see whether or not it would be possible to zone the market to Canadian coal on an orderly basis, the Ontario market. I was going to say it has been a great disappointment not only to Nova Scotia but also to the western operators, after having built up a market, to have to sacrifice that overnight due to exigencies of the war, but we have told them that their interests would not lie dormant, that we will do everything possible to advise the government what may be possible in the way of allocation of our own coal into this market of Ontario, and that is the only hope.

*By Hon. Mr. Mackenzie:*

Q. What about the Hudson Hope?—A. The chairman took that up with me early in December and I was just wondering whether or not he knew—

The CHAIRMAN: I asked Mr. Neate if he knew if any interests were attempting the opening up of the Hudson Hope deposits. There is no doubt about it.

Mr. MACNICOL: Who has it now?

The WITNESS: It is more or less in the prospective stage.

The CHAIRMAN: They are developed now to the extent where they can produce from one mine 2,000 tons a month and the other one is producing 100 or more tons a day. It has more or less a temporary market at the moment, the United States army and the air force and to some extent the surrounding country. When you reach that I shall ask you what you think, from the nature of the coal, would be its logical market. Would you get down into the industrial areas around Spokane that you mentioned a while ago? You said you were sending other coal there. Would that be the industrial market there?

The WITNESS: It is a rather long haul, particularly if you take Telkwa coal of Vancouver and down as compared with Hudson Hope, I think, Mr. Chairman. The competitive factor is the same. If you can get coal, say, from the inland mine around Merritt and Middlesborough, or from the island, the Crow's Nest Pass area into that market, price will govern, as to what coal will come in there. I do not know what your production costs would be at Hudson Hope, but—

Mr. MACNICOL: I suppose they have no equipment of any consequence?

The CHAIRMAN: It is an undetermined field. Telkwa would compete favourably only because of transportation.

Mr. MACNICOL: Is the quality any higher?

The CHAIRMAN: I am no expert, but I think you will find the quality of Hudson Hope better than any coal deposits in Canada any place, better than any place in Canada. I do not know whether Dr. Gray knows anything about it or not.

Mr. MACNICOL: Hudson Hope coal is very high.

*By Mr. Martin:*

Q. How far is that deposit from Vancouver?

The CHAIRMAN: The trouble is there is a lack of transportation. Our committee sometime will have to deal with the whole problem of transportation of the post-war period both as to providing transportation and as to the rate charged for cartage of products and natural resources; but it is 495 miles by railway from Dawson Creek to Edmonton, and Hudson Hope would be about 150 miles from Dawson Creek, though you can get railway connections perhaps a little shorter than that. It would be around another 150 miles to transport and handle that coal and bring it through Prince George and into Vancouver except the part—

Mr. MACNICOL: It could not come by water?

The CHAIRMAN: No, by railway except the part that might go down to the Spokane industrial area. It might be much closer in mileage than the Telkwa coal, but not actually.

Mr. ROSS (*Calgary East*): What direction from Dawson Creek?

The CHAIRMAN: North—

Hon. Mr. MACKENZIE: The coal is mostly on the south side?

The CHAIRMAN: No, the north. There is another coal deposit of the same quality just about 15 miles from where the abortive oil well was drilled, on the far side of the river. That would look as if the coal bands were very very extensive in area. It is a highly carbonized coal, generally called semi-anthracite.

The WITNESS: I doubt very much under post-war conditions if you would be able to obtain any markets in the Spokane-Seattle areas for that coal. You have the Crow's Nest Pass coal area fully developed, they used to ship 150,000 to 200,000 tons of coal annually over the Great Northern. That tonnage was lost when the Great Northern was turned over to oil, and up to the war we only had a very limited market for Vancouver Island coal in Seattle, the markets there being chiefly from the Utah and Wyoming areas, so I do not think it is possible to offer any hope for the northern British Columbia deposits. ♪

*By the Chairman:*

Q. Would the nature of the coal make any difference?—A. The laid down cost is the factor.

Q. Regardless of the quality?—A. I think so, and you have very high quality coal in the Michel area now being developed.

*By Mr. Hill:*

Q. You spoke about the competition of American coal. Is it not possible that after the war the government of the United States is going to insist upon the American coal deposits being more economically worked than they have been in the past? The operations there have been very wasteful and in spite of that they have never been able to pay any interest on the investment. Take Hudson and Pittsburgh; they have never paid any money on the investment for years. Is it not possible the American authorities will say, "Now, we have to conserve these resources; instead of mining this coal in a wasteful way you will have to do it in an economical way. You will have to develop these mines in a manner which will conserve the coal and sell it at a price that will pay something on the investment." If that were done then the Canadian coal could compete without any difficulty.—A. I would say the Crow's Nest Pass would eat that market up over night.

Q. I am speaking of the Nova Scotia coal going into Ontario.—A. There is no doubt there will be a change in the United States after the war, you may be sure of that, and conservation is going to be practised and not preached. That is the way I see it.

I do not know, Mr. Chairman, if I have reviewed satisfactorily exactly what you wanted, but I am still open for questioning.

*By the Chairman:*

Q. Do you agree with Dr. Gray that with proper markets the Nova Scotia coal companies could take care of the returned men from that area?—A. I certainly do, and that is why I say some definite method of allocation of markets would have to be carried out. As you know, in 1936 there was a joint committee in Washington and Ottawa created by the Prime Minister to study the orderly marketing of bituminous coal into Ontario. We were taking Nova Scotia coal as far west as Windsor, Kapuskasing, right into Georgian Bay. And the American authorities naturally did not like to see a couple of million tons of eastern coal in their territory which they had spent money to develop.

*By Mr. MacNicol:*

Q. What would be the amount you are taking into Ontario?—A. About 1,300,000 maximum from Nova Scotia; about 1,250,000 from Alberta—and of that 1,250,000 tons, 100,000,000 would be for steam raising purposes or industrial use, and 250,000 would be domestic coal brought down for household consumption.

Q. Did you say 250,000 tons?—A. That was about the limit that we reached with the subvention scheme.

Q. Bringing Nova Scotia coal to?—A. 1,300,000; we reached 1,300,000, I think is was in 1937.

Q. What was it last year, have you got it?—A. We borrowed Nova Scotia coal from Ontario since the war; we have not got enough to take care of our own requirements in the Atlantic region.

*By the Chairman:*

Q. Have you at any time studied the possibility of opening new industries in Nova Scotia so that you can take care of more Nova Scotia coal in order to insure a greater use nearer home?—A. I cannot say, Mr. Chairman, that I have

given it personal study, but considerable study has been given it by various people. I think that Dr. James' committee, for one; I remember I attended their sittings sometimes last year and discussed the matter with them.

*By Mr. Martin:*

Q. Would you care to say anything as to what Dr. Gray had to say concerning the inevitable contraction of coal production because of the three factors; electrical power, oil, and I suggested, natural gas? What I have in mind, Mr. Neate, is to have you say something about what you think the natural gas situation is. Natural gas, as you know, prevails extensively in western Ontario as well as in parts of western Canada?—A. What I did indicate to you was the seriousness of the situation when we have a 2,000,000 ton lag in United States production. But, coming back to power, back in the early thirties, we lost over 600,000 tons of Nova Scotia coal to the power market in Quebec—hydro electric power—it displaced over 600,000 tons of Nova Scotia coal. That was a serious jar to our production and it was really before 1930, around 1928 or 1929; that is what started the increased subvention programme to develop markets in Ontario to offset the loss due to hydro development in Quebec. As regards oil, I am afraid I do not see eye to eye with Dr. Gray as to oil displacement after the war. I think probably you will find a more serious conservation programme with respect to oil than we had before, particularly in the United States. In answering the further question, as to what gas displacement will be, or mean; I am inclined to think it will be diminishing rather than increasing. At the present time that displacement is 100 per cent because of domestic use. In any event I do not think it amounts to more than probably 180,000 tons of coal equivalent. Does that answer your question?

Q. Yes. There was something more, Mr. Neate, I wanted to know. As to natural gas—and I am speaking now of the Windsor district or, for that matter, the whole of the western Ontario district—it is used much more extensively than Dr. Gray thought. The situation is one which I think you might well tell us something about. Are the gas companies too optimistic as to the availability of gas? To what extent is natural gas a restriction on the production of coal?—A. They have been rather optimistic, Mr. Martin. I talked to Severson on more than one occasion. I do not see any real hope of increasing the gas market in that area.

Q. Of course, the cost of artificial gas is high.—A. The people in that area have been getting 35-cent and 40-cent gas, less than that at times. Now they have diverted to coal. It is rather a hardship to ask them to change back again.

Mr. Gillis was asking just a short time ago what it would cost to sink a shaft up at Coburn area of Nova Scotia. I would say, as a rough estimate, that it would be in the neighbourhood of \$800,000. That would be something to think about in the future, because it certainly would be a salvation to the main land employment of miners.

Mr. McCULLOCH: I am not a member of this committee, but I am very much interested in what has been said. Coburn has a population of 1,500, some 600 of whom are miners. In 1920 Mr. Charles Mitchell and myself contracted to drive a slope alongside the main seam. We sunk that slope 3,335 feet at no cost to ourselves. As a matter of fact, we practically made money out of sinking the slope. They talk about \$700,000 to \$800,000 that it is going to cost to get the coal out of this seam. I consider that a cost of \$250,000 would get into the seam where they would have marketable coal. Mr. Pool's report on that coal was that it was one of the best steam coals in the area, and I think that 500 tons a day could be taken out of that mine with the employment of probably a few hundred men; and coal could be got out of that mine at the rate of 500 tons a day for rail haul—the rail is right into the mine. I think it is one of the best propositions in Nova Scotia to-day for the employment of service men when they come

back from the war. Also, I am very anxious for the Coburn miners to get back to their homes. They have their homes there and I know they are very anxious to get back to them. And now, I want to correct what I consider to be a misleading statement made by Mr. Gillis in his reference to Inverness coal.

The CHAIRMAN: Mr. McCulloch is not a member of the committee. He can only take the floor with the consent of the committee. Is it your pleasure that he should be permitted to continue?

An Hon. MEMBER: Yes.

Mr. McCULLOCH: Mr. Gillis made the statement that this coal was selling in Halifax from \$12 to \$15 a ton. That is a very misleading statement to have get abroad, and I do not think it would do very much good. Inverness coal is selling in Halifax—slack coal—at about \$4.75; run of the mine coal at about \$8; and steam coal at \$11.75. And now Mr. Gillis did not say that about 40 per cent black coal comes out of that steam coal which brings the average paid for the coal down to a very much lower figure than the one he quoted. It has cost the Nova Scotia government, since they took over the Inverness coal, pretty nearly a million and a half dollars of a loss in operating the Inverness mines. I think they are willing to do that to give employment to the men. That is one of the things they took over the mines for. Thank you.

Mr. GILLIS: I do not know where Mr. McCulloch gets his information; my statement was taken from the records of the provincial government. A very serious thing to the government there is that instead of marketing their own coal they handed it over to Cunard Limited. As a matter of fact the figures I have used were taken from the official records of inquiries made into complaints by the provincial government. That is all I have to say on that point. If it can be sold for \$4.25 per ton—

Mr. McCULLOCH: No, I said \$4.75.

Mr. GILLIS: —very little steam coal will be taken out there—

Mr. MARTIN: Mr. McCulloch says \$4.75.

Mr. GILLIS: I am not going to dispute it. I do not know where he gets his figures. I have seen it listed, advertised, at from \$12 to \$15 per ton; and that is from the records of the provincial government. Mr. Purdy or Mr. Neate will have the actual coal prices.

The WITNESS: We can get that for you.

The CHAIRMAN: You might get that at some future time.

The WITNESS: I will get it and have it back for you this afternoon.

Mr. GILLIS: You made a statement—now, I do not want to be misunderstood—that you thought if a market was provided with present operations in Nova Scotia that the coal company could take care of the men returning from overseas after the war. Now, that was not the impression that Dr. Gray created yesterday afternoon—there have been some 2,000 enlistments from the industry—and he stated that with reasonable markets they could take care of the men returning who had enlisted from the industry. There are thousands of boys enlisting from that mining district who never had any employment. They will be returning, and they will be entitled to a job. In your answer a moment ago did you mean that all the men returning who have enlisted from this area can be taken care of by present operations, knowing what that operation is now?

The WITNESS: I say this, that the Nova Scotia industry can be maintained on a pre-war footing providing markets for that coal are restored to what they were prior to the war.

Mr. GILLIS: Do you think that would take care of all the men returning home?

The WITNESS: Well, to-day there are 11,881 men employed as at the end of January, 1943 compared with 13,559 in January of 1942; that is a reduction of 678 men in Nova Scotia, because production is down, naturally, in Nova Scotia. My contention is that provided the government continues subsidizing markets for Nova Scotia coal to the extent that markets were found pre-war, I do not see any reason why the full employment of miners cannot be maintained in Nova Scotia.

Mr. GILLIS: You mean pre-war conditions?

The WITNESS: That is right; not to-day's conditions, pre-war.

*By Mr. Martin:*

Q. You said earlier that you thought industry in Central Canada was very reluctant to use steam coal—perhaps those were not your exact words.—A. No, I said there will be considerable pressure brought on the industry in Ontario in order to maintain the market for American coal.

Q. Pressure by whom?—A. By the American coal salesmen—have you ever met any?

Q. I know what you mean. On top of that there is a problem which you have not discussed, except to mention it and that is the question of transportation costs—does that present any real difficulty?—A. Geography is the real difficulty, and that affects transportation, naturally.

Mr. MACNICOL: Could not we in Ontario increase our purchase by a million tons? I remember a few years ago the Toronto Board of Education bought Nova Scotia coal—I do not know whether they are doing it to-day or not—they might again be encouraged to buy it after the war; not only the Toronto Board of Education but all boards of education throughout Ontario. That would surely mean another million tons.

Mr. MARTIN: That is begging the question.

The WITNESS: We have a market there now of 1,300,000. We could have more provided subsidies are extended to meet increased markets. However, that is a matter of government policy with respect to which I would not be competent to make any statement at the moment.

Mr. MACNICOL: Governments have been very generous and perhaps they will continue to be so after the war.

The WITNESS: I can give you from year to year, not day to day.

The CHAIRMAN: Are there any further questions of Mr. Neate?

Mr. MACNICOL: Just a moment, I haven't got my question cleared up.

Mr. McNIVEN: Mr. Neate has discussed the coal situation in reference to Nova Scotia, Alberta and British Columbia. Now, that there may be no misunderstanding about it, would you kindly indicate whether Saskatchewan still has twenty billion tons of lignite?

The WITNESS: In answer to your question, it is one of the brightest spots on the horizon to-day, the hope that we can increase production in Saskatchewan from about 1,300,000 to about 2,100,000 this year. It is one of the factors in this country we are looking to to save our hides in the prairie provinces this year. I believe we will get from 700,000 to a million tons out of the two new stripping operations now being developed.

Mr. McNIVEN: But there was a substantial increase in production in the year 1942?

The WITNESS: It depends just what you mean by "substantial."

Mr. McNIVEN: Production in 1939 was 958,000 tons?

The WITNESS: Yes; from 1939.

Mr. McNIVEN: And in 1942 it was 1,298,000 tons, an increase of 340,000 tons.

The WITNESS: As a matter of fact, due to our difficulties last year, the production in Saskatchewan was 1,298,000 as compared with 1,319,000 in 1941. It was due to that decline that we started looking into the picture to find out whether or not we could increase it. One of the big stripping mines fell down badly and to that is due the reduction in production last year. As you say, it is 1,200,000 and if we could get it to 2,000,000 this year, it is going to help us out in our service camps.

*By Mr. Castleden:*

Q. What steps are being taken to increase that production this year?—

A. We are providing high rate priorities on equipment and also making financial loans to two of the larger operators on a repayment basis.

Q. Would you say anything about the quality of the coal for the purpose?

—A. It will suit the purpose, if we could get it. If we had had Saskatchewan coal available during the last winter on the prairies, there would have been less hardship and less diversion. From the 15th of January to the end of February, I think it was over six hundred spots in the prairies that we had actually to divert coal in, for household consumption.

Q. That has been taken care of all right now?—A. Yes.

*By Mr. Quelch:*

Q. If the mines in Alberta had been kept in full operation during the summer, there would have been plenty of coal during the winter?—A. That is right.

*By Mr. Ross (Calgary East):*

Q. Assuming that there was a market for power in Alberta, would it be practicable to produce power from coal and would the cost be too great as compared with the cost of producing it from water power to make it practicable to produce power from coal?—A. Studies have been made with respect to the relative cost of producing power from coal, solid fuels and also from water power. I have not the relative figures before me, but I will give you a good example of a large development in Alberta just two years ago. They went to water power rather than coal.

*By Mr. MacNicol:*

Q. In England they produce power from coal at very low cost.—A. You can in Canada, if you have a market for the power. Take your seaboard plant in Sydney. Take your Maccan plant. I suppose the costs were a fraction of a cent, three to four mills per kilowatt hour. Is that right, Dr. Gray?

Dr. GRAY: Yes.

The WITNESS: I do not think you can get more efficient plants on this continent than those two plants.

*By Mr. Purdy:*

Q. That would hardly work in with conservation of our coal resources, allowing our water to go to waste and using up our coal which cannot be replaced.—A. That is so.

The CHAIRMAN: Are there any further questions for Mr. Neate? If not, I want to bring Dr. Gray back for a moment or two.

*By Mr. Castleden:*

Q. Could you give us any statement as to the best Estevan coal, as to its B.T.U. quality?—A. The B.T.U. content of Saskatchewan lignite would vary probably from 6,800 to 7,500. I think that is right.

*By Mr. MacNicol:*

Q. That would be the maximum?—A. Yes, I would think so.

*By Mr. McNiven:*

Q. Might it not go as high as 7,800?—A. Within two or three hundred thermal units, I have given the low and high.

*By Mr. Martin:*

Q. Dosco interests represent by far the largest centre of production in the Maritime provinces. To what extent is that true?—A. 82 per cent.

Q. What is that?—A. 82 per cent.

The CHAIRMAN: Are there any further questions?

*By Mr. Fraser:*

Q. Under normal conditions, how far west is it economic to ship Nova Scotia coal?—A. Under normal conditions?

Q. Yes.—A. Put it this way: without tariffs, without subventions, in ordinary times Nova Scotia coal could not be shipped beyond the confines of the Maritime provinces.

Q. It could not be?—A. It could not be shipped beyond the confines of the Maritime provinces.

Q. How are you going to maintain your Montreal market?—A. Duties and subsidies. I was developing the three stages. You asked under normal conditions where could it be shipped. With the present duty it could go to Montreal, and with the existing subvention it has gone as far west as Windsor.

Q. Under the present duty it could go where?—A. It could go to Montreal.

Q. It would be secure under the present duty?—A. It could go as far west as Montreal.

*By Mr. Castleden:*

Q. I was going to ask a question on that. If there was an exchange of trade, is there any possibility of Nova Scotia coal going into the New England states?—A. Nova Scotia coal did have an extensive market in the New England states some years ago, but that is entirely a matter of arrangement between the governments. Under economic conditions, no, it could not find a market in the New England states. You can put northwest Virginia and central Pennsylvania coal along the New England states at a price, I would say, in excess of \$2 per ton cheaper than you could put Nova Scotia coal in. Anyway, you can put Fairmont coal in the city of Boston cheaper than you can put Nova Scotia coal on boats at Sydney.

Q. That is because of the surplus?—A. It is due to mining conditions, the high cost.

*By Mr. Hill:*

Q. It is true that the Americans sell coal cheaper in Ontario than they do in Pennsylvania. They dump their surplus.—A. I have seen American coal selling in Ontario for 18 cents a ton during the depression.

Q. Selling at two or three dollars a ton less than it was right in Pennsylvania.—A. They could not put it on cars and load it for that.

*By Mr. Fraser:*

Q. What would be the comparative quality as between American and Nova Scotia coal?—A. As I said earlier, Mr. Fraser, the quality of Nova Scotia coal is pretty well standard; and with the production of say 8 million tons, you

have not got variable qualities that you have in a production market of 600 million tons. You have comparable coals in the United States being shipped into Canada practically identical with Nova Scotia coal. You have either low volatile or higher characteristic coals coming in which are probably more suitable for a lot of industrial requirements than Nova Scotia coal. But with the reach of operations in Nova Scotia as compared with the production in the United States, I do not think you could answer that question satisfactorily. You have to take like for like.

Q. The purchaser would have to decide which he would buy?—A. Yes, the purchaser would have to decide that, taking into consideration his plant and equipment, and what the coal is going to be used for. Each individual has different ideas in industry.

The CHAIRMAN: Are there any further questions for Mr. Neate? If not, I would ask Dr. Gray if he would come up again for a moment or two before we close.

Dr. W. F. GRAY, recalled:

*By Mr. MacNicol:*

Q. I wanted to hear from you about the use of Nova Scotia coal in Ontario for making coke for domestic purposes—house heating and so on.—A. As I said yesterday, Mr. MacNicol, Nova Scotia coal is all coking coal. The Sydney coal field produces very good coking coal from the point of view of density of coke and general coke-making qualities. But the practice in the coke trade is to blend coal. The Kopperus Company particularly take a low volatile coal and mix it with a certain percentage of high volatile coal, and probably a third, and mix it all together. They find they get a better grade of coke. As Mr. Neate explained, we have possibly 7 million tons of coal a year from Nova Scotia which is of pretty much of a muchness. In the States they have between four hundred and six hundred million tons which contain some of the finest coking coals in the world, and they select those on the grounds they have determined as making a better coke, and a greater yield of gas. We cannot compete, with one grade of coal, with that particular coking practice which selects grades. Then there is the other matter of delivery price. We cannot compete, not even with subventions, on coal laid down, say, at the waterfront at Hamilton, with American coal; that is, under present conditions.

The CHAIRMAN: Does that give you the information you wanted, as far as he can give it?

Mr. MacNICOL: Yes. That is as far as I can expect him to go at the moment.

The CHAIRMAN: Ladies and gentlemen, if there are no more questions for Dr. Gray, as it is now one'clock I would suggest that we adjourn.

But first of all, I want to express our appreciation of Dr. Gray's evidence and of his coming from Nova Scotia to appear before us; also for Mr. Neate's coming at such short notice. I think this committee is fairly well informed of the conditions surrounding the Nova Scotia coal industry and should be prepared now to possibly make recommendations concerning the re-employment of returned men based on the knowledge it has acquired last session and this session.

I understand that Mr. McNiven is calling a meeting of the steering committee this afternoon.

Mr. McNIVEN: At 8 o'clock this evening, in room 16.

The CHAIRMAN: At that time they will decide the future course of the meetings of this committee.

The committee adjourned at 1 p.m. to meet again at the call of the chair.

ov. Doc  
Can  
Com  
R

Canada. Reconstruction and Re-Establishment  
Special Committee on, 1943/44

SESSION 1943

HOUSE OF COMMONS

SPECIAL COMMITTEE

ON

# RECONSTRUCTION AND RE-ESTABLISHMENT

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 4

THURSDAY, MARCH 25, 1943

WITNESS:

Mr. K. M. Cameron, Chief Engineer, Department of Public Works, Ottawa.

OTTAWA

EDMOND CLOUTIER

PRINTER TO THE KING'S MOST EXCELLENT MAJESTY

1943





## MINUTES OF PROCEEDINGS

THURSDAY, March 25, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11.00 o'clock a.m. Mr. J. G. Turgeon, the Chairman, presided.

The following members were present: Messrs: Authier, Bence, Bertrand (*Prescott*), Black (*Cumberland*), Brunelle, Castleden, Eudes, Ferron, Hill, MacKenzie (*Neepawa*), Mackenzie (*Vancouver Centre*), MacNicol, McDonald (*Pontiac*), McKinnon (*Kenora-Rainy River*), McNiven, Marshall, Martin, Matthews, Mitchell, Purdy, Quelch, Ross (*Calgary East*), Sanderson, Turgeon, and Tustin—25.

The Chairman presented a letter from Mr. F. G. Neate, Deputy Controller of Fuel, Wartime Prices and Trade Board, giving prices of coal produced in Inverness County, N.S., in reply to questions asked by Mr. Black and Mr. Gillis at the previous meeting. This letter was ordered to be printed in the evidence.

Mr. K. M. Cameron, Chief Engineer, Department of Public Works, Ottawa, was called, examined and retired.

Mr. McNiven, for the subcommittee on Agenda, reported the following witnesses would be present: On Friday, March 26, Dr. R. C. Wallace, Principal of Queen's University, Kingston, and Chairman of the subcommittee of the Advisory Committee on Reconstruction, which deals with Development and Conservation of Resources.

On Thursday and Friday, April 1 and 2, two members of the Research Council would be present to discuss the uses that may be made of coal and its by-products.

It is also intended to bring representatives of the cooperative movement before the Committee.

On motion of Mr. Bertrand the Committee adjourned at 12.40 p.m. to meet again Friday, March 26, at 11.00 o'clock a.m.

J. P. DOYLE,  
*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS, MARCH 25, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11 o'clock a.m. The Chairman, Mr. James Gray Turgeon, presided.

The CHAIRMAN: Gentlemen, if you will come to order, we shall start proceedings. I have a letter here from Mr. F. G. Neate, Deputy Coal Controller, giving information that was asked for at the last meeting. With your consent, I will ask the clerk to put it on the record. It will save reading.

The letter referred to is as follows:—

DEPARTMENT OF MUNITIONS AND SUPPLY

OTTAWA, CANADA

Office of the Coal Controller,  
238 Sparks St., Ottawa,  
March 19, 1943.

Dear Mr. Turgeon:

You will remember that yesterday a.m. I promised both Mr. Black and Mr. Gillis to look into the question of production and sale of coal mined at Inverness. The following answers are now submitted for the record:

|   |                     |
|---|---------------------|
| Marketable Coal Produced.....                   | 105,688 tons (1942) |
| Men Employed:                                   |                     |
| Administrative .....                            | 12                  |
| Surface .....                                   | 67                  |
| Underground .....                               | 130                 |
|   | 209                 |
| Basic Wage Rate.....                            | \$3 25 per shift    |
| Actual Production cost f.o.b. cars.....         | 6 10 per ton        |
| Wholesale Prices f.o.b. Mines                   |                     |
| Slack   | Run of Mine         |
| \$2 47  | \$4 22              |
|   | Screened            |
|   | \$5 07              |
| Rail Rate to Halifax.....                       | \$1 60 per ton      |
| Current Selling Prices at Halifax Including Tax |                     |
| Slack   | Run of Mine         |
| \$6 97  | *\$8 47 to \$9 70   |
|   | Screened            |
|   | \$11 47             |
| *Depending upon quantity of slack.              |                     |

The Cunard Coal Company of Halifax are the sole agents for this coal outside Inverness County.

Yours sincerely,

F. G. Neate,  
Deputy Coal Controller.

J. G. Turgeon, Esq., M.P.,  
House of Commons,  
Ottawa.

The CHAIRMAN: We have with us this morning Mr. Cameron, who is chief engineer of the Department of Public Works and who also is chairman of a sub-committee of the James Advisory Committee on Reconstruction. This subcom-

mittee has been dealing with the possibility of individual public work projects planned in advance so that during the post-war period the scheme could be put into effect immediately. You will remember that Mr. Cameron was with us last year. He is with us again now for the purpose of bringing the members of this committee up to date with the work done on that particular subcommittee in the interval between then and now. Mr. Cameron, by the way, will break his statement into two parts, and before going very long will stop for the purpose of permitting questions on the first part of his presentation. Then, if time permits, he will give us the balance and be open for questioning again. I will now call upon Mr. Cameron, and he may stand or sit down, as he wishes.

Mr. K. M. CAMERON, Chief Engineer, Department of Public Works and Chairman of a Subcommittee of the James Advisory Committee on Reconstruction, called.

The WITNESS: Mr. Chairman and members of the committee:

## POLICY FOR POST-WAR WORKS RESERVE PROGRAMME FOR CANADA

### ADMINISTRATIVE MACHINERY

In my statements before the committee last year I began by referring to a distinction which is a special point for my subcommittee. This is the distinction between the administrative machinery—or what might even better be called the mobilization machinery—for a national employment programme, and the actual appraisal and selection of particular works projects.

I think it is important that I should emphasize this distinction again, because my subcommittee is not and never has been an executive body concerned with choosing projects or building up the “reserve” itself. It is concerned with the necessary procedures and organization which will best ensure that we have a fund of projects ready when it is needed. On the lines which this machinery should take, the subcommittee has already recommended, and these recommendations are in the hands of the cabinet. There are still a great many matters of policy which have to be properly discussed and decided, and we would welcome this opportunity of putting some of them before you, and inviting your discussion and advice.

### NATURE OF THE POST-WAR WORKS RESERVE

There are certain aspects of the task which it may be well to emphasize before going on to some of these questions of policy on which we still have to get final answers.

(a) *Projects which ought to be included.*—There is still a tendency in some quarters to assume that a works reserve can be satisfactorily made up (i) of the routine and dirt-moving types of relief works which were relied on for the most part, certainly in local areas, in the thirties; (ii) public projects, which are not relief projects but construction undertakings remunerated at regular rates of wages, but which none the less are very restricted in scope.

With respect to (i) Canadian works programing of the thirties was inadequate on a series of counts:—

A. Co-ordination and planning—lack of a single organizing agency, even within the sphere of the federal government; unevenness in the distribution, quality and scope of projects throughout the country; ineffectiveness of supervision in the face of the greatly varying levels of municipal and provincial administrations.

B. Continuity—the emergency character of nearly all works; yearly appropriations from the federal government down, with resultant uncertainties

and repeated flurries of provincial-municipal negotiation or recrimination at the beginning of each fiscal year; fluctuations in the volume of work which bore no relation to the total need, or even in some years to the normal construction season.

C. Restrictions in the type and scope of projects undertaken—the great majority were dirt-moving jobs; at a later state a principle which was more or less implicitly accepted, that all such works should be strictly noncompetitive with private business, was much too rigidly interpreted.

D. The type of employment provided—overwhelmingly manual and unskilled labour; the almost universal practice of “rotation” gave only short spells of work to successive relays of men with doubtful effects on their morale and little improvement in their income.

E. The aggregate volume of work and investment—in relation to the total amount of unemployment to the proportion of the unemployed cared for by direct relief only, or to total national income.

With respect to (ii), the works projects constitutionally the responsibility of the federal government are:—

- Public buildings
- Harbour and river works for navigation, including canals
- Government telegraph lines
- Dominion parks
- Experimental agricultural farms and stations and forestry stations

Under National Agency:—

- The government-owned railways
- National harbours
- The Canadian Broadcasting Corporation
- Trans-Canada Airways

I believe it should be made clear that the post-war task is much larger, and also must take an entirely different character, from that of the depression years. What is needed is a national development program which will make the best use of our existing assets, restore or improve those facilities which we are overworking under the strain of war and result in programs which will help to open up opportunities of productive investment as well as provide social benefits in themselves.

This means incidentally—another point not always fully understood—that the programme is not necessarily confined to construction projects only.

(b) *Techniques of mobilization.*—The subcommittee has been so far more concerned with these techniques than with the examination of particular projects. It feels justified in this, not only because of its terms of reference, but because of the need for public education on this point.

It cannot be too frequently or too strongly emphasized that a construction project to be of real value, and despite the best will in the world, demands complete preparation in its technical, legal and financial details, and that there should be put in hand, concurrently with these, detailed consideration of all the factors which ultimately determine its acceptance, modification or rejection. Adequate appreciation of the time involved is generally lacking, as is that of the great value which initial expense in this complete preparation has in producing the maximum all-round benefit at the least final cost.

Construction is a most fluid and adaptable instrument or commodity. It can be made use of in small or large units to suit the circumstances of the locality or region where need develops; it can utilize in large measure the local resources of labour, material and equipment; and when adequately planned to meet those needs, and to utilize the resources, by its contribution it becomes a major factor in the social welfare of the community and its ultimate enrichment.

For this purpose there should be enlisted all appropriate technical aids in the engineering and physical features of the program. It is not enough to have general proposals from citizen bodies, although this is desirable. We must use the resources and imagination of architects, conservationists, engineers, town and community planners; in fact all available technical skill and training should be enlisted in this effort.

The other aspect of planning is, however, as important though likely to be overlooked. It is that of fiscal planning. From the Marsh report on Social Security for Canada, I quote: "It is not enough to be satisfied that a project can promise certain economic results, or even that it has been the subject of an engineer's report and worked out to the blue-print stage. It is necessary also to project into the future the actual costs of the projects, their relation to the normal revenue available annually, and the conditions under which the five-, six- or ten-year plan, or whatever it may be, can be accomplished or accelerated.

Intelligent planning depends on a mastery of underlying facts and suitable plans cannot be improvised in a few days.

I am speaking as an engineer, and Mr. Hill will support me, when I say that you cannot overnight start a job. You have to start by planning, get your details worked up and get everything ironed out in advance or you are going to run into all sorts of headaches, delays and waste of money. I have had plenty of experience in my thirty-five years in public life, and know just how that is. Take our own department. As you know, parliament meets in January usually. The estimates are brought down about at the beginning of the actual construction season, and until parliament has passed those estimates we do not know what we are expected to do. The actual construction season in the greater part of Canada, of course, is, at the most, eight months. I have had to overcome that disability in this way. I have had to tell our engineers, "Pick out the projects which look good, which have a reasonable chance of being considered, and get your plans ready in advance." Suppose we get ten plans prepared and the money is provided for six of them. We are just that far ahead. That is the only way that I have been able even to get a reasonable proportion of these projects for which money is voted by parliament actually put under way in that season. The expenditure involved in an adequate program will be great and the matter of sound organization is so important that the subcommittee has felt that in the first instance attention should be given to wholly dominion projects, that is, the kind of projects which are distinctly of national importance, and in which the dominion government may reasonably take a major share of responsibility in their preparation and financing.

Here again it is important to draw a distinction between the kind of administrative machinery necessary to build up all these projects into a post-war reserve; and the actual kinds or types of projects which ought to be included. It would be particularly welcomed by myself and by members of my committee if we could have the benefit of your discussion and suggestion on what these projects should be. In trying to put some of these ideas together I have divided them into a few main headings. Under communications and transportation there is the matter of highway and roads; navigable waterways, including canals and ports; government railways, telephone, telegraph and radio, including rural telephones. Under conservation and development of natural resources there is forest and mining roads and other means of transportation and communication; prevention of soil erosion and flooding; conservation and balanced use of water resources; reclamation and drainage. Under urban and rural improvements there is the matter of slum clearance; the matter of what are called sometimes distressed areas or depressed areas, and the matter of rapid transit in cities. I introduce there the question of the Municipal Improvements Act of 1938, with which I have no doubt you are familiar, and which was, until it was made temporarily inoperative, most successful. Rurally there is the question of improvement of road conditions, transportation and communications, rural elec-

trification, community centres, schools and hospitals. You could go on to a considerable length on that. Then, of course, there is the question of tourist facilities. These are just some suggestions I venture to lay before you.

We are, of course, considering the matter of classification of jobs but, as I said, we would welcome your consideration of those matters. At the last meetings of your committee I submitted in draft form a questionnaire outlining the considerations which would effect the relative evaluation of projects. Before arriving at this in its present form it was given the widest distribution possible amongst all organizations and individuals that we could contact whom we thought would be interested in the questionnaire.

The CHAIRMAN: I do not know whether there are enough copies to go around.

The WITNESS: I did not know how many would be here. I brought over about 25 or 30. Accompanying it is a general explanatory statement, and if time will permit we might run over that, Mr. Chairman. The explanatory statement is on the first two pages, and the condensed form of the questions in the questionnaire is on the second two pages. I would like to have this incorporated in your record in some way.

The CHAIRMAN: We will put that right on the record. The first part of Mr. Cameron's submission is finished, and we will throw him open to questions. I would be glad if, so far as possible, the questions could be kept in line with the submission that he has made, or matters arising from it, because he has another portion which he will give later. We are open for questions.

*By Mr. McKinnon:*

Q. Mr. Cameron, you are co-operating with the provinces, are you, and the various works programs?—A. I deal with that in the second part. Actually I understand the provinces are forming their own organizations. We anticipate there will be co-operation with the provinces at a later date.

Q. Up to date there is no committee for co-ordinating the various informations and having it at headquarters?—A. Not yet.

Q. There is another question. Are you working in co-operation with the railways? For instance, a person could imagine rock ballasting, heavy steel, elimination of curves, protection signals, block systems, new equipment, a thousand angles to it; is there any committee set up by the railways that is working with you in regard to the furtherance of these projects?—A. There is no committee set up by the railways that is working with us yet. I referred to the fact that we, as a committee, are not charged with the duty of assembling details of projects. The other thing is, of course, as you know, that the railways are just about run off their feet, if that is the proper way to put it, with the work that they are doing, but I am very confident from what I have been able to learn from some of the railway people that they are giving this matter very careful consideration, looking forward to it and trying to get the details outlined.

*By Mr. Martin:*

Q. Mr. Cameron, Mr. McKinnon has asked a very important question. I wonder if I could amplify it a little bit. You said that you understood there would be some co-ordinating body later on. Have you thought in terms of the necessity of a national body, not only co-ordinating the provinces, but some national body that would deal with your specific phase of the program, in fact, with the whole program?—A. Yes, we have.

Q. You have thought of the need of it yourself?—A. Yes, and that is part of the scheme of organization which is now before the cabinet.

Q. I see. Would you mind telling us how the mechanics of that are worked out? Do you mean that you ask the provinces to come in?—A. Well, we propose that the dominion should first of all organize itself, and it would be necessary

for the dominion to show that it has the organization before it could, to my mind, very well approach the provinces.

Q. That is in respect to matters that come under the Department of Public Works?—A. All matters of federal interest. I referred previously that in the thirties with regard to the program of that period there was not even a dominion co-ordinating body.

Q. No, and I am grateful to you for what you have said, but I really intended to go further. Have you not any proposal for a national body that would include all provincial and federal matters of interest to avoid overlapping and have a common policy?—A. That is what it will lead up to.

*By Mr. McKinnon:*

Q. Right at the present moment I suppose in various parts of the country there are committees set up working on this matter, municipal committees, citizens and communities; they gather ideas pertaining primarily to their own community. Suppose they want to send in certain recommendations; to whom would they send them now?—A. The Hon. Mr. McQuesten, according to the newspapers, I understand so far as Ontario is concerned has written to every municipality, or every subordinate jurisdiction in Ontario, and asked them to survey their field and send to his department, which is the Department of Municipal Affairs in Ontario, all their proposals. They will have to work them out, and if the picture develops as we hope it will, then there will be co-ordination between the provincial programs, municipal programs, and the dominion program.

Mr. MATTHEWS: Have you reference now to this questionnaire? I have not seen it before.

The CHAIRMAN: It might be well if Mr. Cameron read the questionnaire.

Hon. Mr. MACKENZIE: I think so.

The CHAIRMAN: And then resume the questioning afterwards; would that be agreeable?

Mr. BENCE: A large part of the questionnaire has to do with the brief he has already presented.

The WITNESS: On the first page I have duplicated those five or six points.

The CHAIRMAN: I have not read the questionnaire but it might be well if he read it.

*By Mr. MacNicol:*

Q. I would like to ask Mr. Cameron a question first. Right at the commencement he spoke about the distinction between the policy and technique of the committee and the policy of tabulating actual jobs. Did I understand you correctly?—A. Yes.

Q. I infer from what Mr. Cameron said that the committee has not got down to the position of picking out and classifying, detailing and compiling, everything pertaining to special jobs?—A. That is quite right.

Mr. MACNICOL: I would say, Mr. Chairman, that unless this committee takes drastic action to see to it that before long somebody is detailed and ordered to get down to the problem, which is the immediate problem in my judgment, of special jobs, if the war ends we will be in a hopeless position with multitudes of men having nothing to do because there is not a job apparently ready to send any one to. In my opinion that is the most important part of the work of this committee—not stating theories, or suggestions—but getting right down to the practical business end of it as we businessmen would do; get right down to special jobs. According to what Mr. Cameron said we have not arrived at that stage, and it is over a year since we commenced this study. That is too long a time to waste. We have got to get right down to business quickly. There are numerous jobs that can be gone on with which require little preparation,

to arrive at a decision. Take in your own riding, Mr. Chairman, there is the projection of the highway and railway on the north side of the Peace river through the mountains and through your riding right out to Prince Rupert. It should not take any more than 24 seconds to decide that has got to be done.

The CHAIRMAN: I have decided that now, but to get this committee to decide it is another matter.

Mr. MACNICOL: The details of that special job should be prepared so that when the war is over a thousand or more men could be sent right to that job. We have got to get down to specific jobs, and the quicker the better.

Mr. MATTHEWS: I think Mr. Mackenzie quoted a number of days ago the number of returned men and the number who had found employment.

Hon. Mr. MACKENZIE: These records come from welfare officers in every city of Canada. Out of 75,000 discharged men there are roughly 1,500 out of employment at the present time. Of course, there are special conditions prevailing now that will not be in effect after the war.

Mr. HILL: There is no trouble finding work for men coming back now.

Mr. BENCE: That is quite an important point Mr. MacNicol makes.

Mr. HILL: He has made a real point.

Mr. MCKINNON: I agree 100 per cent.

The CHAIRMAN: Mr. Cameron's subcommittee of the James committee, of course, is not attached to this committee. All we can do is get his reports before dealing with that. Whether they have dealt with it fast enough is another matter, but they have been dealing with that for some considerable time, and perhaps Mr. Cameron, through reading this—I have not read yet this statement in connection with the questionnaire form but I did notice that coordination and planning is one of the things mentioned, and perhaps Mr. Cameron, either through questioning or reading this, can give us further information along the lines suggested by Mr. MacNicol.

Mr. MACNICOL: May I continue, Mr. Chairman, from where I left off? I should not speak of your riding. I never want to get down to talking about ridings or anything like that, but I did it from the point of view that the projection of the railway and the highway on the north side of the Peace river through your riding is an important national objective, not a riding objective merely, and should be gone on with.

The CHAIRMAN: National and international both.

Mr. MACNICOL: It should be carried through. What I cannot understand is why some members of the main committee have not come before us or sent us details of that one single job as well as many others. It is patent on the face of it. Look at the position you are in to-day in northern B.C. That province has no connection at all with the Alaska highway from your end of the country. Anyone can see that, and why wait two minutes before arriving at a conclusion to go ahead with that work?

The CHAIRMAN: I can answer that perhaps better than Mr. Cameron can. That proposal to link up the Alaska highway with the main highway system of British Columbia down through Prince George and into Vancouver has been under consideration by the military, and so far has been held up because a conclusion as to its necessity from a purely military standpoint has not yet been reached. It is held up awaiting determination of the military policy of the nation. That is the reason why it has been held up so far. I think it would be quite all right for me to say it is under consideration and has been under consideration for some time, but the final decision has not yet been reached.

Hon. Mr. MACKENZIE: In connection with the point raised by Mr. MacNicol—I find myself in sympathy with it—I should like to point out that

on the 22nd day of March, 1941, I suggested this to the first meeting of the Advisory Committee on Reconstruction:—

Measures to be taken in Canada now:

(a) Would it be wise to obtain a five- or ten-year plan from all the provinces of public works projects and developments in order of priority, which are deemed necessary as provincial undertakings?

(b) Would it not be wise to obtain from the federal government departments, such as Public Works, Mines and Resources, Transport, Finance, a similar plan outlining reconstruction projects such as public works, reforestation, youth training, tourist highways, etc.?

These submissions should then be grouped under three headings:

(a) Those definitely provincial and municipal;

(b) Those definitely federal;

(c) Those definitely joint undertakings.

Housing should have a very foremost part in any such submission.

So the very point raised by my friend was raised by me two years ago at the inception of the advisory committee.

The CHAIRMAN: Raised by you and presented to the James committee?

Hon. Mr. MACKENZIE: And presented to the James committee. Mr. Cameron was not then identified with it, I believe.

Mr. HILL: May I ask why the government does not take some action to appoint somebody with responsibility to see that that is done and that recommendations are made to the government with regard to expenditures in certain provinces and have the government deal with them by accepting certain ones and be responsible for a certain percentage of the cost?

The CHAIRMAN: This committee will do that now.

Mr. HILL: Yes, but we are not getting anywhere. That is what we are supposed to be doing, but we are listening to theories and not getting anywhere.

Mr. McKINNON: The very first thing we should do is something along that line.

The CHAIRMAN: We are reaching that now.

Mr. MACNICOL: May I suggest to you that at our next meeting or the meeting following we have somebody here to give us the detail in connection with projects that I suggest, such as a project to provide transportation by road and rail through to the coast, and after we listen to that we on the committee can then decide in its favour or otherwise, and if we decide in its favour we will make a firm recommendation to the government that that be done, but we must have engineers here.

The CHAIRMAN: I doubt if we can have that at the next meeting, but we may at the following. However, I was going to bring to the attention of the members of the committee this fact, that sometime during the last session—I just forget what date it was—in the middle of our discussion I left the chair and asked the committee if it would sit in camera in order to deal with the very matter that we are now discussing. I did not want to make it public because I was not sure whether the members of the committee would agree with it or not, and since I was the chairman I did not want any publicity on a suggestion of mine that might run counter to the feeling of the committee generally. My suggestion was that we should then—and that is ten months ago—recommend to parliament that an organization such as we are now discussing should be created for the purpose of dealing with provinces and municipalities wherever necessary, but certainly for the purpose of setting up federal machinery—

Mr. MARTIN: On a national basis.

The CHAIRMAN: And I suggested—it was purely as a suggestion—that the legislation known as the Prairie Farm Rehabilitation Act should be considered as the basis for the legislation setting up my proposed national body. I mentioned the Prairie Farm Rehabilitation Act because it deals with certain problems confronting the three prairie provinces, and it provides machinery which can result and often has resulted in amelioration of some of the evil conditions affecting the people of those three provinces. I knew from personal experience that we in British Columbia in my own constituency—I was dealing at the moment particularly with the project at Pemberton, a reclamation project stopping the flooding—I knew if that Act were extended that certain problems in British Columbia could have been solved and I felt that there were similar problems in other provinces of Canada whose solution could have been reached by some such body as that which was set up by that particular Act.

Now, I do think sometime—and I am very glad to hear expressions of opinion this morning—this committee should consider making a recommendation of that nature in a report to the House of Commons so that the machinery may be created if the House of Commons think it wise to follow our advice. I am leaving that thought with you for the time being.

Mr. MacNicol, with respect to your question, I shall bring that matter immediately to the attention of the chairman of the steering committee, and I feel that before very many meetings have passed, if the steering committee advises, we can act on your suggestion in connection with the northern British Columbia condition.

Mr. QUELCH: There is a question I should like to ask Mr. Cameron in order to find out the way in which the committee works. Mr. Cameron referred to the consideration of financial costs. I should like to ask him this question: If the project is sound, from an engineering point of view, and if it is desirable from the point of view that the results achieved will justify the labour and materials expended, and if the labour and materials are available for the project, will the project be gone ahead with on the basis that financial cost will not be any impediment so long as repayment is at the rate of depreciation and interest is a pure rate?

The WITNESS: As I understand your question—

Mr. QUELCH: Public project.

The WITNESS: As I understand your question, I would say that would be a very desirable project.

Mr. QUELCH: Is that the basis on which you are working? Do you have that in mind when you are looking at the question of projects; is that the way it is done?

The WITNESS: Well, it would certainly be a factor.

Mr. MARTIN: In fairness to this witness, obviously they are going to do all they can, but that would be a matter of policy. Mr. Quelch has touched the question, but I do not think Mr. Cameron would be expected to answer a question that touches a matter of policy.

Mr. QUELCH: Mr. Cameron said they would have to give consideration to financial cost.

The WITNESS: I think I was asking the committee for their views on the question of financial cost.

Mr. MACNICOL: I will give you one opinion on that, Mr. Chairman, in connection with what Mr. Quelch has just said. He asked the question, whether the government projects which should be gone ahead with would only be projects that would give returns and pay interest, I believe.

Mr. QUELCH: No.

Mr. MACNICOL: Any returns of upkeep.

Mr. QUELCH: No. I said, if a scheme was desirable so far as the engineering point of view is concerned and in so far as the results are achieved of carrying out that project, then will the only governing feature, in so far as finance is concerned, be that the finances shall be made available on a pure rate of interest; that is, if the government finances a scheme, would it finance it on the actual cost of carrying the account in the bank, and, secondly, that the repayment shall not be at a faster rate than the rate of depreciation, so people in the future shall pay their fair share of the depreciation of the plan. That would mean reducing the cost down to the minimum; you could not reduce it below that.

The CHAIRMAN: Mr. Quelch, do you not think that your suggestion should come before the committee when we decide, if we do decide, to set up a body to deal with projects from the engineering point of view as to the nature of the project that should be dealt with. I am only suggesting that to you; it is a good question, but it might be better at another moment before another meeting.

Mr. QUELCH: The scheme would not be discarded purely on account of financial cost?

The CHAIRMAN: It would not be discarded by Mr. Cameron's committee. I think anybody would be quite safe in saying that.

Mr. QUELCH: That is what I want to know; it would not be discarded by Mr. Cameron's committee on that account.

Mr. MACNICOL: In listening to Mr. Quelch I arrived at the conclusion that works may not be gone on with unless they were economically satisfactory at the moment. At that time I had in mind that the country has to be opened up; therefore public works that are gone on with in a country that is now not opened up would not show any returns at the present time, but in due course they would. I have in mind a canal around the Vermilion chutes on the Peace river. There the river drops 24 feet in three or four miles. A canal around the chutes would open up a straight fresh water route of around 900 miles. It would open up the country and therefore, in my judgment, work on a canal there would be entirely justified, but at the present time there could not be any revenue and there could not be any return for quite a long time, but the country would be opened up and returns would come from the opening up of the country, the building of villages, the development of mines and lumbering and so forth. That is where the returns would come from. Why should work like that be barred at the moment because there would be no returns?

Mr. BENCE: I should like to be clear on the point we discussed a few moments ago. How are we going to work out from a practical point of view a program across the whole of Canada in order that we may know that this project is feasible and should be recommended by this committee to the government? I understood Mr. MacKenzie to say that is the purpose and function of this committee. How are we going to go about it? If we have one or two projects all very well, but what about others? How are we going to go systematically across Canada and pick out the feasible project and work out all the details in connection with it from an engineering point of view and present it to the government?

The CHAIRMAN: By setting up a national body to do it. You were not on the committee last year, but that is a suggestion I made last year.

Mr. BENCE: What is going to be done about it now?

The CHAIRMAN: It is for this committee to advise parliament and for the government to decide. What we are doing at the moment is bringing ourselves up to date from the studies that have been made by the subcommittee on public work projects, a subcommittee of the James committee on public work projects.

Mr. BRUNELLE: We studied last year, and have been for a part of this year, principles, theories and finances and all sorts of plans. We have been going from one thing to another. Since we started our work has there been one plan which was discussed here upon which we agreed and which was submitted to the government as a recommendation of this committee?

The CHAIRMAN: No.

Mr. BRUNELLE: Now, what have we done if there has not been even one plan submitted to the government with a definite recommendation? It seems to me we should take one question, discuss it, and if there is something to be done then we should decide on it and submit it, and then the government will appoint surveyors or somebody to find out definitely what has to be done. I think in order to be practical and to be sure that we achieve something we should do that. We should take all the suggestions that have been made and pick out one or two and conduct it to its final conclusion. After all, we are trying to find work for the returned men and those who will be out of work after the war is over.

Now, why are the people working and prosperous at the present time? It is because industries are functioning. If the same industries which are functioning now will function after the war we shall have a settlement of practically the whole thing.

Hon. Mr. MITCHELL: First of all, you have got to consider the construction industry, that is one of the basic industries and it is divided into three or four sections; and we have got to give consideration to transferring from war production to peace production. It strikes me—I may be speaking out of turn on this—that the paramount concern of the moment is a consideration of the construction industry, and we should have someone here before us who understands construction. I agree that the provinces should be consulted about purely provincial undertakings. Then, there is the vitally important thing, the transfer from war production to peace production of the industrial structure; and that in turn divides itself into three or four easily digested subjects. We should get men to work on that.

Mr. BRUNELLE: Mr. Chairman, why don't you pick out these subjects and get to work on them? I might repeat that if the same industries which are functioning now and are employing most of the people now—people who are working at the present time in this country—if they are still functioning after the war our problem is pretty nearly all settled.

Mr. MARTIN: That is a big "if". Many of them will not be functioning and perhaps one of our greatest responsibilities may prove to be finding ways in which they can be made to function. Right at the moment we are dealing with proposals for providing for the interim, the period of liquidation, through the agency of public works—something to give all people work. I strongly support what the Chairman suggested, that this committee should go on record now to meet the wishes of Mr. MacNicol. I for one feel that is a matter with respect to which this committee could make a concrete proposal now; and in that way, so far as possible, when the war is ended and we have thousands of men returning and thousands of men who will be out of work, we will have something to put them to work on right away, and not leave ourselves in the position we found ourselves in a decade or so ago, giving relief without any return for it. The problem is a difficult one. Mr. MacNicol has talked about your constituency, Mr. Chairman; that is entirely proper. But the heavy concentration of industry, with all respect, is not in your community. I am speaking now of my community where the problem will be a terrific one; and it is all very well to have these plans, and these plans must be projected, but the job will be at the cessation of hostilities, when the industries of the communities will obviously not be working at high tempo and there will be thousands of men out of work. What are we going to do then? It seems to me that there should be some agency through which definite jobs, particularly in highly concentrated areas, will be available

so men can be immediately transferred from industry to these projects. And if we do not do that now, at the end of hostilities the situation will be chaotic, and we will be exactly where we were between 1929 and 1940. Mr. Chairman, I strongly support the suggestion that has been made. I do not know whether we want to move that you should make a recommendation in parliament now on that subject or not.

The CHAIRMAN: I think we should wait a little while, much as I particularly would like to proceed. I think we should wait a little while longer before making any specific motion.

Mr. HILL: Mr. Chairman, I think we are going right back to where we were in this committee last year when we were discussing these things in their general aspects. You recall that I made a suggestion, after listening in four or five meetings in which we discussed generalities, that we should appoint sub-committees on the different problems, and that those sub-committees work out the problems of the respective provinces with which they are familiar; that we take one for each of the nine provinces and ask the provincial members of this committee to serve on the sub-committees so appointed and put before these sub-committees such recommendations as they may have with respect to each of the several provinces: say, the member for New Brunswick would bring forward material of immediate concern to New Brunswick; the same with respect to Ontario, Quebec—and so on west. I still think we should do that; that is, that the members of this committee from the provinces do that in conjunction with the provincial authorities, getting some information from the provincial governments; and that the sub-committees should place their proposals before this committee that it may accept or reject them as it pleases. If the members could not prove to the main committee that these different projects are sound they could be thrown out; those that are sound could be placed on the record for recommendation to the government to deal with. And now, it is all right for Mr. MacNicol to make a recommendation in your province, because he happens to be familiar with it, having been out there; but I do not know anything about it, and unless it was put before me in the more concrete form I would hesitate to give it support. I made that recommendation last year and thought it was going to be carried out. I hope within a month to be able to place before this committee some detail as to what is required in the province of New Brunswick, projects which would be of assistance not only to the province itself but to the country as a whole, and to ask this committee to recommend its adoption by the government and that they take their share in the expenses involved in so far as they feel their responsibility for employment to be related. At the same time I would expect the provincial government to assume its share in any expenditure involved, particularly in so far as it proves of immediate concern to the province of New Brunswick. If that is done by all the provinces, we are going to get somewhere. What right have I to get up and talk about the west; no more than many of the Ontario members would have of getting up and talking about the east, which they do not know. We are not going to get anywhere proceeding as we are at present. I recommend that subcommittees be appointed to deal with these matters and that their membership be a fair representation of the various provinces, and that we have one day or two days to deal with each of the provinces and consider their recommendations.

The CHAIRMAN: We have done that to some extent for the province of Nova Scotia, and Mr. Hill is now a member of the steering committee—do you want to bring that up at the first meeting of the steering committee, Mr. Hill? That was the line of procedure you suggested last year.

Mr. HILL: Yes, I will do that, Mr. Chairman.

Mr. BERTRAND: I am afraid that our committee is getting a little impatient or nervous on these questions by trying to stress the point at this time that

we should come to some definite conclusion and make recommendations. As I understand my duty as a member of this committee that is not the way to do the job. I claim that we are here to study the national problem of reconstruction; not to deal with it piecemeal, as Mr. Hill has suggested; and Mr. Hill has stated that in the course of a month or so he will be able to place before this committee some concrete suggestions with respect to the province of New Brunswick. Is it not a fact that at the present time this committee is endeavouring, with the officials who are coming before us, to get at the various aspects and techniques of the different problems that we may have to face? When we are in full possession of the facts contained in this material we will be in a position to make some concrete proposals. I would call attention to the James' committee which was represented before us last year and was to make a survey of the whole situation. I think they gave an answer at one time to the specific question put by Mr. Quelch this morning that finance was not going to be an impediment; and I take that very view, that we are not bound to study these financial questions, except to the extent that we may find it desirable so to do; that it is not absolutely necessary for us to discuss that. Then, Dr. James has a number of sub-committees that are studying matters such as those brought before us by Mr. Cameron this morning. Mr. Cameron is here to say what his sub-committee have been doing and how far they have gone. Also we have the federal department who are studying projects and proposals peculiar to each. Then, too, the provinces are studying these very problems; and the municipalities and counties are doing the same thing. So far we have not received a concrete proposal from any one of them. What we are endeavouring to do at the present time is to prepare ourselves to be in a position to study intelligently all these propositions or proposals when they come before us. I for one fail to see why we should make, or consider making, one specific recommendation to the government. That would be going about the thing piecemeal—to make just one recommendation would be the same as offering the government a palliative for one particular place, no matter where it might be. I think our committee, Mr. Chairman, as I said before, have become a little impatient or over-anxious for the moment about these things and that we should view the things as a whole, wait until all the projects and propositions have been placed before us, and in the meantime make a thorough study as we go along and demonstrate to the people of Canada that we are taking a very serious interest in this whole matter. I suggest that such a course would be preferable to just giving consideration to one particular project at a time; that it would be better for us to study the whole matter before us and then make our recommendations. There is no very great hurry with these recommendations; if they are made this week or next week is of no great concern of the moment; it is not a matter of trying to get headlines for this committee—I hope not. I am saying these few words to explain my position and my understanding of the situation.

The CHAIRMAN: I do think the discussion, to some extent, has cleared the atmosphere, and as chairman of the committee I am very glad it took place. I was going to suggest that we have Mr. Cameron here with us, and if we are through questioning the statement which he has already made, we should ask him to proceed with the balance of his presentation. I do think that the questions asked so far, and the discussion, will be very helpful to the work of this committee. We must not forget, for instance, that Dr. James' committee has been dealing for two years with some of the matters which some of us think we should be able to clear up in an hour's time. When you get into these questions they are very, very big and intricate ones. I think this committee is making good progress. I really feel that. If I did not, I would tell you so. But, now I think we should let Mr. Cameron proceed; and I do not think it will take

many sittings before the most impatient member of the committee will be satisfied with what this committee can do.

Mr. BLACK: I think the main responsibility for this committee must always be to assist in the laying down of plans for giving employment in private industry. I was, unfortunately or otherwise, in the government of Nova Scotia during the hard years from 1929 to 1933, and the responsibility of giving employment in private industry was wished upon that government to a very large extent, if not to a total extent. My opinion is that this committee must give major consideration to the encouragement of employment in private industry. At that time—I have the figures here—the payroll of private industry in the province as indicated by workmen's compensation returns amounted to something over \$63,000,000, and that dropped down to about half. No matter if the government of the province spent a million dollars or five million dollars or ten million dollars on works projects it could not hope to replace a decline of that volume in private employment; it would not be able to compensate for the loss of employment involved in the poor years. And I believe for one that that condition is going to exist after this war; therefore, Mr. Chairman, the first duty of this committee I should think is to see that private industry is encouraged to continue active and useful; at least, more active than was the case formerly. I recognize that there are many projects that should be undertaken by governments—provincial, municipal and federal. We have some major problems in the maritime provinces. Mr. Hill knows some of them, and there are many, many more that might be considered. We have projects down there that have been before the people for many, many years. There is that project for a tunnel or causeway to Prince Edward Island; and I think the rest of Canada is in duty bound to implement that, as that was one of the terms of confederation. I have no doubt that this committee will have specific figures and reports from Mr. Cameron and his committee with respect to that. Another major project which sooner or later must be undertaken is the tunnelling or bridging of the Strait of Canso, and the rebuilding of that railway. There is another major project, the Chignecto Canal, which I believe it has been demonstrated in this war is desirable and necessary as a defence measure, as well as a commercial undertaking. There are many of these major undertakings that can only be undertaken by the government. To what extent and how far we should go in this committee in recommending these in preference to other projects is a question. Of course, there are some that have been before the public for many years; the Chignecto Canal, for instance—that has been before the people down there since the French settlers came to that country. Mr. MacNicol referred the other day to a canal in Manitoba some twenty-four miles in length, I think; that may be desirable; but I think this committee before it goes into a project such as that should give consideration to these proposals that have been before the country, in the old settled parts of the country, for a much longer time.

Those are my general views, and I think that we shall have to agree on a general basis under which we will make specific recommendations. I think that is very important. We could make recommendations here for localities that would be without limit and run to hundreds of millions or billions of dollars. Where are we going to start and where are we going to stop? I think we shall have to give fairly definite consideration to that before we start making specific recommendations.

The CHAIRMAN: I think that is right. If we decide now that we are going to discuss various projects, as every member of this committee is a representative of a constituency, the projects would be unlimited in number. I do not think we should do that at the moment. I think that we should proceed with finding out what these government appointed—they are not appointed by parliament—committees have decided as a result of their studies. We can reject all their recommendations if we wish. But I think, as a parliamentary body,

we would be making a mistake if we did not find out what their studies have taught them, whether we agree with them or not. I would now suggest, with respect to the members, that we might hear the end of Mr. Cameron's submission and then decide at any time we wish, among ourselves, whether we are going to deal with particular projects or not. I do think if we start dealing with particular projects, the war will be over long before we reach any conclusion.

Mr. McKINNON: Mr. Chairman, may I just say a word before Mr. Cameron starts again. As you say, this committee can either accept or reject any of the recommendations of these various committees which are set up. But as a suggestion, do you not think these recommendations should come to this committee for study before they are given publicity in the country?

The CHAIRMAN: There is a good deal in that suggestion.

*By Mr. Bence:*

Q. I should like to ask a question on the statement Mr. Cameron has already made. I should like him to elaborate, if he would, on a statement which he made, and which he stated again in paragraph C on the first page of the questionnaire, when he refers to the type of jobs that were provided during depression years. He says, "At a later stage a principle which was more or less implicitly accepted, that all such works should be strictly non-competitive with private business, was much too rigidly interpreted." I wonder, before he goes on, if he would advise us as to exactly what he means there, and possibly give us an example of the type of thing that might have been undertaken which would have been to a certain extent competitive with private enterprise and that kind of thing?—A. I am not prepared at the moment to give you any specific example. I would have to go back over the records a bit to find that out.

Q. I was trying to understand what principle you were getting at there.—A. As I tried to point out in my submission, the projects that were carried out were only those that were strictly within the constitutional ambit of the dominion government. What we do feel is that a private program will have to be expanded much beyond that limit.

Q. Do I understand that your suggestion is that they should enter into things which are competitive with private business? That is what I should like to know?—A. If private business cannot handle them, then the government has got to face that picture; and if the project is worthwhile, it has got to get behind it somewhere.

The CHAIRMAN: Is that satisfactory, Mr. Bence?

Mr. BENCE: Yes.

The CHAIRMAN: All right, Mr. Cameron. Will you carry on?

The WITNESS: Would you like me to deal with these considerations for evaluating projects?

The CHAIRMAN: All right.

Mr. BLACK: Would it not be better if Mr. Cameron would summarize these? We will have them to read.

The CHAIRMAN: Yes, we will have them to read.

The WITNESS: The document which you have before you can be taken as read.

The statement follows:

## INFORMATION REQUIRED FOR THE SELECTION AND RATING OF PROJECTS IN A NATIONAL POST-WAR RESERVE

### REPORT ON TRIAL DRAFT OF PROJECT QUESTIONNAIRE

The terms of reference of the subcommittee on post-war construction projects suggested specific phases of the problem as requiring careful consideration.

One of these was: *What standards should be applied in the study of specific projects in determining their place in the program?*

The need of some guiding principles in this direction is drawn from experience of works projects as relief measures during the depression period of the 30's. When every allowance has been made for the efforts put into the various public works projects of that period, and also for such progress as was actually made in administrative co-ordination and efficiency, it still remained true that the Canadian works program was inadequate on several counts, among which may be cited:—

A. Co-ordination and planning. Lack of a single organizing agency, even within the sphere of the federal government; unevenness in the distribution, quality and scope of projects throughout the country; ineffectiveness of supervision in the face of the greatly varying levels of municipal and provincial administrations.

B. Continuity. The emergency character of nearly all works; yearly appropriations from the federal government down, with resultant uncertainties and repeated flurries of provincial-municipal negotiation or recrimination at the beginning of each fiscal year; fluctuations in the volume of work which bore no relation to the total need, or even in some years to the normal construction season.

C. Restrictions in the type and scope of projects undertaken. The great majority were dirt-moving jobs; at a later stage a principle which was more or less implicitly accepted, that all such works should be strictly non-competitive with private business, was much too rigidly interpreted.

D. The type of employment provided. Overwhelmingly manual and unskilled labour; the almost universal practice of "rotation" gave only short spells of work to successive relays of men with doubtful effects on their morale and little improvement in their incomes.

E. The aggregate volume of work and investment. This was too small, in relation to the total amount of unemployment, to the proportion of the unemployed cared for by direct relief only, or to total national income.

The questionnaire drawn up as a preliminary was intended to secure the first essentials of information which would permit certain important questions to be answered:—

1. A description and analysis of the project is required in detail (apart altogether from whether engineers' reports are attached), and this schedule serves as a guide for the details involved.

2. The projects should be related to the needs and resources of the community for which it is desired, not presented *in vacuo*.

3. It is vital to assess the importance of the project in terms of size, and in terms of its economic and social revenue.

4. It is of primary importance to direct the attention of the sponsors of a project to the finances available for the project over at least the minimum planning period.

5. The assembly of all information along more or less standardized lines is necessary if reasonable decisions as to priority or sequence are to be reached.

Much work in the matter of specifications and collection of information would probably remain to be organized by the body set up as the national co-ordinating unit. It is assumed, in other words, that subsidiary schedules might develop certain matters, more particularly the suitability of the project for financial assistance from federal sources, and the relation of the project over a period of years to revenue sources in the area concerned. It is also to be assumed that such schedules would probably not be put to effective use or be adequately filled without assistance and interpretation from representatives of the central co-ordinating body.

The questionnaire discussed herein is not, therefore, to be considered complete. It has, however, been given widespread circulation, and has received the benefit of comments from many sources, which are brought together herein. In its final form the schedule should be somewhat more positive, and directed to the establishment of definite criteria, classifications, and priority ratings.

A reminder may be in order that it is vital that selection be not made on purely legalistic grounds or that narrowly worded legislation lead to routine approvals and rejections. The relation of the projects to economic restoration and to social welfare in general must be constantly in mind. A new power plant in a strategic location might be worth a hundred road-making projects all over the country. Developments of housing, schools, hospitals, research stations, rural facilities might be abortive if local or other governmental bodies made their plans on the assumption that merely "stop-gap" or manual labour projects were needed. Even conservation measures which are relatively simple might be hampered from full effectiveness if limits appeared to be placed e.g., on the use of certain equipment, or powers of land acquisition or land-use enforcement. The corollary in the latter case is that a conservation project should contain assurance of any necessary provincial legislation or municipal by-laws. To mention one of the more imaginative possibilities, a many-sided program devoted to transforming existing aviation resources to peace-time commercial and private-passenger uses, including continental and trans-Atlantic traffic of all kinds, might be of sufficient weight and impetus to galvanize the whole Canadian economy.

## POST-WAR CONSTRUCTION PROJECTS

### CONSIDERATIONS FOR EVALUATING PROJECTS

#### A. *General*

1. Will the project increase directly or indirectly the economic or industrial efficiency of the region concerned (or in the country generally)? Give details.

2. Has the project special relationship to additional works which may be necessary for the re-adaptation of industrial plant or other facilities of the district from wartime to peacetime uses? Give details.

3. Is the project concerned with amenities which increase productivity or which help to produce a revenue indirectly (such as highways, waterways, pipelines or other transport facilities, communication facilities, certain conservation or land drainage measures, etc.)?

4. Is the project concerned with new construction, additional works, or maintenance or repairs deferred owing to the war?

5. Will the project contribute to the welfare of the community (e.g. in the form of recreational, educational, cultural, public health facilities, etc.)? Give details.

6. (a) To what extent are locally produced materials and equipment available for the project?

(b) Will the project compete with existing local industries?

7. In what other ways, if any, is the project of particular relevance or importance in this particular area?

#### B. *Labour and Employment*

8. What employment opportunities does the project offer during and after construction (a) for skilled labour, (b) for semi-skilled labour, (c) for unskilled labour?

9. What is its relationship to probable unemployment in the region? Will it absorb labour previously engaged on war work?

10. What are the local circumstances as to labour supply available for the project? Is labour supply adequate or will extra labour be required? Has local labour other part-time employment?

11. What is the estimated labour cost of the project (a) in respect of labour from local sources, and (b) other sources? (*See Financial.*)

### C. Financial

12. What is the total estimated cost? State date on which estimates are based. State time required to carry out project.

13. Is the project financed, if so, how? Will funds be required beyond one fiscal year? Is assistance required in the way of loans or credits?

14. Give details of the most desirable building and financing plan in respect of timing, for a construction period of up to five years.

### SUMMARY OF ESTIMATED EXPENDITURE

| Cost items               | 1     | 2     | 3     | 4     | 5     | Balance needed to complete project |
|--------------------------|-------|-------|-------|-------|-------|------------------------------------|
| (a) Land .....           | ..... | ..... | ..... | ..... | ..... | .....                              |
| (b) Labour .....         | ..... | ..... | ..... | ..... | ..... | .....                              |
| (c) Materials .....      | ..... | ..... | ..... | ..... | ..... | .....                              |
| (d) Equipment .....      | ..... | ..... | ..... | ..... | ..... | .....                              |
| (e) Administration ..... | ..... | ..... | ..... | ..... | ..... | .....                              |
| Total .....              | ..... | ..... | ..... | ..... | ..... | .....                              |

15. Will the project be maintained after completion by municipality, province, dominion or other body?

16. Is provincial, municipal or private financing available? Give details.

17. To what extent is the project self-liquidating?

### D. Technical

18. Has the project been subjected to engineering or other technical study and report? If so, attach copy of study or report.

19. Can an engineering or technical report be furnished, if requested? (If so, such report or reports should provide answers to the questions immediately following.)

20. What procedure has been followed in arriving at the estimate of costs?

21. What length of time will be required to complete all necessary plans and specifications?

22. Can work be undertaken promptly once the plans are completed? What preparatory work can be undertaken prior to completion of plans and specifications?

23. How much land is required? Is the land yet acquired? Any other property rights to be acquired?

### E. Legal (Property)

24. Is land public-owned or private property? Can land required, if private, be obtained by exchange for public-owned land?

25. Are enabling legislation or by-laws, or ordinances required? Have expropriation procedures been cleared? Does project conform to an existing or projected town, city, or regional plan?

### F. Grants-in-Aid

26. If a grant-in-aid is indicated, what controls are to be set up in relation to—

(a) Technical specifications, supervision, and inspection during construction, etc.

(b) Labour conditions?

(c) Expenditure of funds provided for the project?

(d) Maintenance after completion of the project?

The WITNESS: I think I can best meet the request which has been made of me by discussing the third and fourth pages. As you will see, we have divided the document into a general section, A, under which there are seven suggested questions which should be answered, to bring out the general features of the particular project or projects. It may be possible to combine a number under one scheme.

Then, under section B, labour and employment, there are questions 8, 9, 10 and 11. With respect to question 8, we are endeavouring to make connections with people in a position to furnish us with information as to how much skilled, semi-skilled or unskilled labour is likely to be employed on different classes or types of projects, so that when a project comes up for consideration, we will be able to say, that a project in that area will give employment to a certain amount of skilled, unskilled and semi-skilled labour.

Then, under section C, we break down some questions under the general heading, financial. In connection with question number 14, we have a tabulation in which can be shown the approximate division of the total expenditures by years.

*By Mr. Martin:*

Q. There is no question there as to the cost of maintenance in question number 15, is there?—A. No.

The CHAIRMAN: That would come up on each project.

Mr. MARTIN: I think a very important question in evaluating a projected work is to know what it is going to cost to maintain it afterwards.

The WITNESS: It is a very important question, because the point is—and I have seen it raised—that probably the maintenance afterwards would almost swamp the project.

Mr. MARTIN: Certainly.

Mr. HILL: You have it down here.

The WITNESS: I thought it was there somewhere. Yes, it is number 17—to what extent is the project self-liquidating?

Mr. HILL: That covers it.

The WITNESS: Under section D, technical, there are questions 18, 19, 20, 21, 22 and 23. Under section E, legal (property), are questions 24 and 25. And under section F, grants-in-aid, is question 26.

That was the series of questions that finally evolved after we had given a very wide distribution of our original draft of it. I have a file about that thick (indicating) of the replies that were received, all of which were gone over. Our subcommittee spent a very considerable time in arriving at this as an outline of the questions on which it would be fair to relatively evaluate the different projects.

*By Mr. Martin:*

Q. Could you characterize the bodies to which you sent this questionnaire? —A. I will tell you the way we did it. We took the Canadian Almanac. It has a list. In that there are about ten pages of associations, and we wrote and sent this document to every one of those associations. There were some, of course, that is would have no relation to. We eliminated them, but we sent it to a great many.

Q. To bodies like chambers of commerce?—A. Yes, every chamber of commerce or association of chambers of commerce; the Royal Architectural Institute; the National Construction Council; the Canadian Construction Association; the Association of Mayors of Municipalities.

*By Hon. Mr. Mitchell:*

Q. Labour organizations?—A. I think so.

*By Mr. Matthews:*

Q. Are you referring to the questionnaire in its present form?—A. No. This is the result of the replies. I should like to say that in the very great majority of cases they accepted it in the form in which we sent it out. But it took a lot of time to get these replies in. We had to send follow-ups out. But finally we got a very good cross-section of replies from one end of the country to the other.

Q. Where would you suggest that this questionnaire be sent—to provinces, municipalities, boards of trade or individuals?—A. I have a request from the Deputy Minister of Public Works of British Columbia, in which he wants to know if I will send him a copy of this, because out in British Columbia they are preparing a list of projects, and he wants to know just on what basis we suggest they might evaluate them themselves. I propose to send it to him.

*By Mr. Quelch:*

Q. Have any provincial governments made submissions on behalf of the provinces recommending projects for their provinces on a provincial scale?—A. Not that I know of.

Mr. QUELCH: Mr. Chairman, if, later on, we are discussing individual provinces, would it not be as well for us to have the deputy ministers in order to cross-examine them rather than having, as Mr. Hill suggested, one member of this committee from each of the different provinces submit himself to cross-examination? There are very few of us who are engineers. It is all right for Mr. Hill and Mr. MacNicol, perhaps. But there are hardly any members of this committee who are qualified to undergo cross-examination on the merits or demerits of a project.

Mr. MARTIN: Oh, every member of the committee is.

The CHAIRMAN: Mr. Quelch, we could ask any person we wished to come. You could bring that up at the steering committee. Are there any further questions for Mr. Cameron in connection with this form, because Mr. Cameron has another part of his main submission that we may take now?

*By Mr. Matthews:*

Q. Suppose a chamber of commerce suggested a building program of houses; how would that be received?—A. Well, in our subcommittee we have not the time nor have we the facilities nor have we the authority to discuss individual projects. We are trying to get at what you might call the guiding thoughts that anybody, given that power, might benefit by.

Q. That is what I am getting at.

The CHAIRMAN: Will you give us the rest of your submission?

The WITNESS: The matter of provincial, municipal and other co-operation is generally the next part of my submission. Some interest has been shown on the part of a few municipalities in setting up a surplus, or reserve fund for postwar expenditure, but so far as I know this is effective only to a limited extent.

There are evidences of several of the provinces preparing lists of projects, either of works under provincial jurisdiction or responsibility, or of municipal jurisdiction or responsibility, or both. I have reason to believe that in the provinces of Ontario and Quebec, work is being proceeded with on a roads program of considerable magnitude and that this is being done in as much detail as possible up to the point of being ready for actual execution. In Ontario, the Minister of Municipal Affairs has, as indicated by recent articles in the press, invited municipalities to proceed with the preparation of lists of projects in the municipalities.

Other voluntary organizations, such as the National Construction Council, the Royal Architectural Institute of Canada, the Engineering Institute of Canada, and possibly others are endeavouring to get together a statement of deferred works of construction or maintenance in the non-governmental field.

While the subcommittee feels that it is necessary to get a foundation ready of dominion projects, it is also fully aware that there is need for provincial and local consultation on many important fields of construction development and investment, and that every effort made by the provinces, municipalities, utilities and private industry as well will be of direct value, and may indeed be imperative if a sufficient reserve of peacetime projects is to be mobilized.

The importance of enlisting local interest was referred to last year as being much in our minds. I think we should like to emphasize particularly this time, now that local interest in planning for the postwar period is showing itself all over the country, that paper planning is not enough.

We must have engineer planning, in the sense of assessing all the technical features of construction and development.

We must have town and environment planning, in the sense of proper preparation of the regions or sites on which buildings and works must be located, so that their value will be maintained in the future, and social amenities will be considered.

There must be financial planning, in the sense of preparation in advance as far as possible of funds which will help to meet the costs, and of plans which will endeavour to relate local projects to the financial resources of the communities concerned. This should not be taken as precluding any hope or possibility of assistance to the lower levels of government from the higher levels.

But equally it is necessary to emphasize that it would be unwise and undesirable to proceed on the assumption that every worthwhile project is a fit subject for grants-in-aid. We have to seek reasonable lines for division of effort; to set out if we can, certain categories, some of which may justifiably be one hundred per cent federal matters, others which may equally justifiably be one hundred per cent local matters. In between there is room for various types of joint or co-operative financing. We want to get as much help as possible in making up a comprehensive list of the types of projects, with these principles in mind.

I have previously referred to the interest of municipalities in setting aside reserves as surplus for postwar works, and I return to this particular point, as it would appear that provinces would be well advised to make it possible for, and encourage municipalities to set aside such reserves. The position in this matter is not clear in many provinces, though a number of them have expressed their interest and desire to promote this development.

Referring again to the matter of dominion projects, it is known that in the United States all federal agencies setting aside appropriations for future construction are required to report the major details to a central federal source. Would this not also be desirable in Canada? We would welcome the views of the committee on this point.

In favour of such a procedure, the desirability of getting comprehensive figures and of helping to co-ordinate the timing of construction in the postwar period are features which should be kept in mind.

It has often been stated, but will bear repetition, that a program of adequate dimensions might be made completely ineffective if timed wrongly, or if no controls existed so that the effort is delayed or dissipated.

Arising out of their experience, the United States set up a Works Programming Office and the functions of that body include, among other things:—

1. To encourage, and assist in, listing the needs of each state and municipal government in the fields of public service and capital improvement.

2. To promote the policy of long-range planning of useful public services and of needed capital improvements on state, county, and local levels, so that programs of worthwhile work will be available when needed.

3. To aid and encourage the governmental bodies in wisely programming for a period of years their services and improvements, on a priority basis of relative need and expediency.

You will observe that these functions relate to assistance being available for planning, both physical and financial, or budgetarily, and particularly of the giving of advice as to community needs or facilities considered as a whole, or in some balanced relation to each other in the community. The assistance refers to technical assistance, not to financial aid. This Works Programming Office has a field staff who are available to counsel and guide or otherwise help local or municipal governments in their capital budgeting.

We would welcome the views of the committee on the desirability of some such procedure as this in Canada.

The CHAIRMAN: Are there any questions that any member wishes to ask Mr. Cameron?

Mr. BLACK: There is one thing occurs to me. I do not know whether it has been dealt with by Mr. Cameron. I think the committee will have to deal with it. The purpose of this committee is to get employment for those returning after the war and to take up labour in war industries. There is going to be a clash—I do not think Mr. Cameron has dealt with it—between whether you want to give employment as such and provide labour with work, or whether you want the project completed in the cheapest way. We had that to deal with in Nova Scotia. Moneys were voted each year, two or three million dollars, to give employment. In many of these projects we prevented the use of power machinery in order to give employment with the result that the work cost us three or four times what it could have been done for, and perhaps should have been done for with modern machinery. You can move earth today at a few cents per yard. Done by hand with the regular rate of wages it will cost, I suppose, Mr. Hill, tenfold what it can be done for with modern machinery today. There we have a clash at the very beginning, whether we are going to undertake government projects in order to get the work done the most economical way using modern machinery, mass production, as it were, or whether we are going to have them projected with the object of giving as large a volume of employment as possible. That has to be decided at the very beginning.

Of course, where there is a balanced production, such as there is in central Canada to a much greater extent than in outlying parts of Canada, employment that is not given when machines are used on public works is given in the industries of that community. In Nova Scotia we have to buy that machinery from central Canada and a lot from the United States. Employment is given in those factories and not given on the job where the work is being done. That is a very difficult and serious decision that has to be made very early. If we want the cheapest and most effective job, the best value for the money being expended on the job with the purpose of getting a completed job of course it will be done with modern machinery in the most economical way, giving minimum employment for those who need employment most, unskilled labour.

The CHAIRMAN: Mr. Black, I think you directed that question to me as chairman. I may say that as I understand the terms of reference we are not a relief committee. We are a committee set up for the purpose of making recommendations designed to properly reconstruct and re-establish Canadian national life, and to some extent international life, when the war is over, and as I see it I have not any intention of discussing any matters relating to relief of men who

cannot find employment. Our duty is to find employment in the proper sense of the term.

Mr. QUELCH: Mr. Chairman, Mr. Cameron in his last submission very definitely raised the whole question of financing. Maybe this is not the time to discuss it but Mr. Cameron suggested that some districts might or might not be able to finance some project. I would say it depends very largely upon the method of financing that is going to be used. If, for instance, they are only going to be given a ten year loan at 5 per cent interest I would say many districts will not be able to handle it because you are increasing the cost by 50 per cent. On the other hand, if it is going to be possible to make loans to districts, we will say for a period of 20 years, or even a greater length of time, and the rate of interest will be the actual pure cost of interest—we will say, three-quarters of 1 per cent, which is the rate the government are getting money for today—then a district that might not be able to handle the cost of financing in the first mentioned way would be able to handle it the other way. So I do not know how you can divorce the question of finance from this discussion.

The CHAIRMAN: I think we can at the moment. I do not want to rule it out of order, Mr. Quelch, but at the moment we are deciding on ways and means. The time will come when we will have to discuss how to raise the money to do such things, but I do not think we have reached that point yet, Mr. Quelch. Are there any further questions of Mr. Cameron?

Mr. ADAMSON: May I make an observation?

The CHAIRMAN: Are you a member of the committee?

Mr. ADAMSON: No.

The CHAIRMAN: I just wanted to make sure that you would be on the record properly. All right, Mr. Adamson.

Mr. ADAMSON: I have been intimately connected with the University of Toronto and one or two of their suggestions with regard to making surveys in Ontario, and also the question of housing. I do not think it has been adequately impressed upon the committee—I do not know—the tremendous amount of work to be done immediately in carrying out surveys. I mention two things; the survey of the reforestation of old Ontario will require immediately about one hundred survey parties, and will take fifteen or twenty aerial survey machines completely equipped. That is work that needs to be started immediately. It will take probably two years to carry out an adequate survey just in that part of Canada. Furthermore, to town-plan and to arrive at a comprehensive scheme of housing for the district of Toronto will take at least two years and cost in the neighbourhood of \$100,000. I just mention those two projects that I think the committee might consider starting at once. I do not think we really have understood the terrific job there is ahead of us to get the information that is required. That is all I have to say.

The CHAIRMAN: Mr. Adamson, Dr. Wallace is to come before the committee to-morrow morning to deal with natural resources in general. Are there any further questions of Mr. Cameron? Mr. Adamson, you mentioned housing particularly. There is another subcommittee which will deal with that.

Mr. MARTIN: I think your questions on evaluations are pretty well done, but I am wondering if you have reached the stage yet in your work where you are able to enumerate specific projects that you have in mind?

The WITNESS: I do not quite get your question.

*By Mr. Martin:*

Q. Have you in mind now, if the war were to end to-day, a series of projects in the order of their deserving priority?—A. You mean specifically?

Q. Yes.—A. Do I know of a sewer here and a housing project there?

Q. Yes.—A. No.

Q. When do you expect to be able to reach that point in your work?—A. I do not think our subcommittee expects to reach that point in our work; we were not set up for that purpose. We were asked to suggest a scheme of organization, which we have done and which, as I have said, is before the cabinet now.

Q. It is before the cabinet now?—A. To which all these projects would be directed.

Q. That scheme of organization envisages a national body to deal with specific projects?—A. To deal with specific projects.

Q. All I can say is I hope we get it very soon.

The CHAIRMAN: The sooner the better.

Are there any further questions? If not I have an announcement to make—perhaps I should ask Mr. McNiven to make the announcement.

Mr. McNIVEN: The chairman intimated to you Dr. Wallace would be here to-morrow. Thursday and Friday next it is intended to bring two members of the Research Council before the committee to discuss the uses that may be made of coal products, or by-products of coal such as aniline dyes, perfumes and various products that may be manufactured from it. At a subsequent date it is intended to bring representatives of the co-operative movement before the committee, just as soon as we ascertain from that group the nature of the presentation they will make.

The CHAIRMAN: I will tell the committee that we had to postpone consideration of the Nova Scotia coal problem because the authority of the railways who could give us the information about the Strait of Canso and other matters that came up is in western Canada at the moment. As soon as he is available we will resume consideration of that particular project. If there are no further questions a motion to adjourn will be in order.

Mr. MARTIN: I wonder if I may make a remark before we adjourn. I am not making this remark just as a matter of criticism, but simply to satisfy my own emotional disturbance. We do not seem to have any order, may I suggest? This morning we have Mr. Cameron; last week we had Dr. Gray of the coal company. To-morrow we are going to have Principal Wallace; then you are going to go back to the coal business. Surely we ought to have a program that would be in order.

The CHAIRMAN: We have to leave the coal problem because the other matter left for discussion with regard to the coal problem could not be reached until the authorities are available and they are not available at the moment. Part of the coal problem will come out of this meeting that deals with the evidence on the uses of coal. The coal problem is an extremely important problem because nearly 50 per cent of the economy of Nova Scotia depends on those coal deposits.

Mr. MARTIN: You do not think the disappearance of cold weather will dispense with the problem for this year?

The meeting adjourned at 12.40 to meet to-morrow, March 26, at 11 o'clock a.m.









Gov. Doc.  
Cam  
com  
R

*League of Reconstruction and Re-establishment  
Special Committee on 1943*

SESSION 1943  
HOUSE OF COMMONS

SPECIAL COMMITTEE

ON

RECONSTRUCTION AND RE-ESTABLISHMENT

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 5

FRIDAY, MARCH 26, 1943

WITNESSES:

Dr. R. C. Wallace, Principal of Queen's University, Kingston, and Chairman of the subcommittee of the Advisory Committee on Reconstruction dealing with Development and Conservation of Natural Resources.

Mr. K. M. Cameron, Chief Engineer, Department of Public Works, Ottawa.

OTTAWA  
EDMOND CLOUTIER  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1943

MAY 11 1943



## MINUTES OF PROCEEDINGS

FRIDAY, March 26, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11.00 a.m. Mr. J. G. Turgeon, the Chairman, presided.

The following members were present:—Messrs. Authier, Bertrand (*Prescott*), Black (*Cumberland*), Castleden, Eudes, Fraser (*Northumberland*), Gillis, Hill, Jean, MacKenzie (*Neepawa*) Mackenzie (*Vancouver Centre*), McDonald (*Pontiac*), McKinnon (*Kenora-Rainy River*), McNiven, Marshall, Martin, Matthews, Nielsen (*Mrs.*), Poirier, Purdy, Quelch, Ross (*Calgary East*), Sanderson and Turgeon.—24.

Dr. R. C. Wallace, Principal of Queen's University, Kingston, and Chairman of the subcommittee of the Advisory Committee on Reconstruction dealing with Development and Conservation of Natural Resources, was called, examined and retired.

Mr. K. M. Cameron, Chief Engineer, Department of Public Works, Ottawa, was recalled, further examined and retired.

On motion of Mr. Martin the Committee adjourned at 12.45 p.m. to meet again Thursday, April 1, at 11.00 o'clock, a.m.

J. P. DOYLE,  
*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

MARCH 26, 1943.

The special committee on Reconstruction and Re-establishment met this day at 11 o'clock a.m. The Chairman, Mr. James Gray Turgeon, presided.

The CHAIRMAN: Gentlemen, we have a quorum so we will come to order. There will be two chemists from the Research Council here to discuss further uses of Canadian coal. The clerk of the committee will mention it when sending out notices for the next meeting. That will tie in with the study we have been making of the Nova Scotia coal development. We now have Dr. Wallace who is, as you know, chairman of a subcommittee of the James Advisory Committee on Reconstruction. He will bring us up to date with the conclusions reached by them in their studies since he was with us at the last session.

Dr. R. C. WALLACE, called.

The WITNESS: Mr. Chairman, Mr. Minister, and gentlemen: As you know, the subcommittee with which I am primarily concerned in the committee on reconstruction is the one on the development and conservation of our resources exclusive of agriculture which is under the hon. Mr. Mackenzie. I discussed with you the last time we met the problems that seemed to be arising in that matter. Since that time we have sent two reports to the government, one dealing with general problems and ways and means in general terms to meet them as far as we can see, and another dealing with the question of organization, because our responsibility of the subcommittees and of the main committee is to advise the government as to machinery and organization after laying out more or less what seem to be specific general problems. Perhaps I should emphasize that our responsibility is not to deal with particular special problems in special parts of the country, although we are all interested in them, and naturally I found last time in this committee that there was a good deal of discussion on special specific problems. That is not our responsibility, and that we would leave to the type of organization which we have considered to be the advisable organization to carry this whole problem through; but naturally in looking at the problem in its larger phase we have had to get a picture of specific individual questions as well, and are not without knowledge of them although we are not advising specifically with regard to special problems in special areas.

I think I should explain that at the beginning because it might help to save time in any discussion and questions that come afterwards. We deal with mineral, forest, water power and water, wild life, recreational facilities, all together. We have given a report on what we have found in those general fields, and what we feel ought to be done particularly related to the reconstruction period.

We have been assisted very greatly by memoranda from the various departments of the federal government that are concerned with these various resources. We have memoranda on the mining situation, memoranda on power, memoranda on fish resources and their problems, memoranda on the national parks, memoranda on wild life, all submitted to us from the permanent officials of the federal government.

We also have memoranda from several of the provinces very carefully prepared as well dealing with their specific problems in various of these resources. We have had consultations and conferences with the people concerned with forestry and mining, and a group of our subcommittee went out west to deal with power problems and water problems throughout the western provinces. We are hoping to have a conference at a central point in the Maritimes within the next three weeks to get the picture of the Maritime situation clearer with regard to all the resources in our mines.

Perhaps I might outline one or two of the problems that seem to appear in various individual resources. As far as forestry is concerned there is now being assembled through the cooperation of the provincial authorities data as specific and definite as can possibly be obtained as to the particular areas and their size that are within reasonable reach of merchantable development in the various provinces, the need that there is for forest management of them and for other scientific developments so as to keep these resources as a continuous croppable forest asset to the country; the number of men that would be involved in order to do that that we think should be trained, because there will be a variety of training for them, thinking always of returned men, and roughly the cost that would be involved in each case. That is being assembled through the assistance of one of the officers of the forestry branch of the Department of Mines and Resources here in Ottawa who is visiting the various provinces and discussing the detail with them.

The provinces are handicapped in this regard—and this comes up so often—that the detailed surveys are not sufficiently complete to give as accurate information on this matter as they would like to give themselves, but they are doing the best they can to get them completed so that there may be gathered together and assembled a total picture of the more immediate needs in forest labour trained to maintain and conserve our forests without depreciation in the merchantable area.

I think I probably mentioned to you the last time we met that in the 400,000 square miles of what may be considered accessible forest wealth in Canada there is today as much growth per year as will meet all depreciation, either through logging or through parasite damage or through fire. It is being renewed by nature in that whole area, but unfortunately it is being renewed over the whole wide area and not in the places where the most logging is done. In other words, we are cutting from the edge inward practically in a swath like a reaper in a field of grain, and consequently gradually the forest is being depleted.

*By Mr. Martin:*

Q. What do you mean by merchantable area?—A. An area that within a reasonably few years, taking the postwar period, could be used by an industrial corporation to get out timber; that is not going too far back beyond economic limits, provided there is a reasonable market for timber overseas or locally after the war.

That will give a definite appraisal of the number of men that can be used and the way they are to be used and the cost that will be involved. How that is to be shared we are not suggesting at the present time at all. More than that, a very detailed survey is being made by a man who is very competent in the matter as to what may be the probable demand for timber after the war. That is a very difficult matter because it depends so much on the relationships in overseas trade which are by no means clear to anyone as yet, but it is necessary to get some kind of reasonable picture in order to apportion, if it can be done, the actual supply of merchantable timber from various areas in Canada, and know how much can reasonably be put into reconstruction and rehabilitation of

those areas. After all, it does depend in large measure on the amount of money that comes out. We cannot avoid facing that problem, and it is necessary in this, as in so many other things, to get some idea at least of what may be the market demands after the war. It will be fairly easy, when the housing sub-committee of the committee on reconstruction has done its work, to know what will be needed in reconstruction in Canada in housing, but that is only a part of the picture.

I think it was in 1938 we had \$350,000,000 more of export lumber than lumber materials we brought into Canada, so you see our picture is a very large expanding export picture. That is one of the many problems that face us in international relationships after the war. That is being done.

I should have mentioned at the beginning that these data papers, which have been supplied so liberally to us by the federal government authorities, and by the provinces, I should think, Mr. Mackenzie, would be available to members of this committee. I found them to be exceedingly valuable, and I am sure that the members of this committee, who are interested in any of these problems, would find them to be so as well. They have been prepared very carefully by men who have worked in these fields for a long period of time and know the problems.

*By Mr. McNiven:*

Q. Did I understand you to say there was an exportable surplus in lumber in 1938 of \$350,000,000?—A. The trade balance in our favour in lumber materials was \$350,000,000. It makes forest products one of the most valuable of all our Canadian products from the standpoint of international trade.

*By Mr. Martin:*

Q. What is wheat?—A. I do not know what wheat stands at. Perhaps there is one other thing I should say. The forest engineers, a very capable group of men in Canada, have prepared a memorandum which is exceedingly able. They have got it into a pamphlet now, a statement on forest policy. This is the best thing I have come across in a detailed practical statement of what the forest needs are in Canada. I am sure this would be available also to the members of the committee as a printed document. It deals with forest management, forest economics, training of men for forest work, and the rest.

Mr. ROSS (*Calgary East*): Published by the department?

The CHAIRMAN: The Canadian Society of Forest Engineers.

*By Mr. MacKenzie (Neepawa):*

Q. Were you about to leave that?—A. Yes, unless there are questions. I am going very hurriedly over these points.

Q. Some three or four years ago—I think it was 1936—a committee went across Canada—I think Colonel Rattery was the chairman of the committee—to find any possibility of helping returned soldiers particularly and other people out of work, and one of the things that they discussed and took up was the question of reforestation. I sat in down here with the committee after they came back and they discussed reforestation with some of the forestry men here. If I remember correctly they were not very enthusiastic about the number of men that a reforestation project would employ.

The CHAIRMAN: Did you say they were not enthusiastic?

Mr. MACKENZIE (*Neepawa*): They were not enthusiastic.

The WITNESS: I think they would say in Ottawa that a minimum of 10,000 men could be employed, and I think they would consider that quite a minimum figure, but that figure has been quoted as necessary. When we have got together all the material from the provinces that might be considerably enlarged.

*By Mr. MacKenzie (Neepawa):*

Q. Would the men be permanently employed?—A. No, not necessarily. The number permanently employed we do not know yet but it will be presumably a smaller number than that, but temporarily to the extent of, let us say, three or four or five years, something like that. Over a period that would probably meet some of the difficulties of readjustment in which industry might find itself.

Q. What I meant was permanently employed for the year.—A. I think that would be the case.

Mr. McNIVEN: It would not be seasonal.

*By Mr. MacKenzie (Neepawa):*

Q. It would not be over a short period twice a year?—A. No, I do not think that is the thought at all. They would have to be employed permanently.

Q. What would they do in winter time?—A. Suppose there is survey work carried on; there is a great deal of work to be done in analysing surveys, and computing the actual resources that there are. Our surveys are very limited as yet in forestry. In the old days at least they employed men when they used to estimate forest resources in the winter much more easily than in the summer by estimators in the woods in winter. I am not prepared to go into detail on this matter. Frankly I do not know enough about it to say.

Mr. BLACK: Dr. Wallace, there is a feeling in the Maritime provinces that it is not practicable to reforest from an economic standpoint. It sounds well and does create an asset, but having in mind the compounding of taxation over the period of years, where you can go out and buy land with fairly good cover now for 25 cents or 50 cents or \$1 or \$2 per acre, you cannot by hand or mechanically or artificially reseed and reforest an acre of land to compete with nature and give the owner of that land a return or any attraction from the standpoint of investment.

The WITNESS: Perhaps I should explain—I should have done this at the beginning—that there is very little thought of any replanting in this whole problem. It is not a question of replanting at all. It is a question of making nature do its work in the most satisfactory way. It is forest management; it is not forest replanting; it is not reforestation; it is afforestation. There is a distinction between the two.

*By Mr. Black:*

Q. Would that necessitate the various lands reverting to the Crown, or would that be done by private ownership?—A. Well, as a matter of fact, a great part of the work that is done now is done under private ownership. I think private ownership, the larger companies, fully realize the necessity of forest management under the best possible scientific knowledge.

*By Mr. Martin:*

Q. Research is being conducted by the government, the experiments in afforestation are done by the city, and the carrying out of those experiments, the practical measures, are done by private industry?—A. If you take the municipal and the county forest areas now being set up in several places, they are in the main, of course, land that has reverted to the public authorities; they have purchased land and created an area which now has a communal forest. Now, the provincial government usually in that case gives the forest men that are needed, the trained foresters, and these are taken then to be show areas, so to speak, as to what could be done in similar wood lots from which one-third of our wood comes to-day. In Canada the wood lot of the farmer is an extremely important asset. One-third of all wood that comes out of our forests

to-day comes from wood lots. They are being rapidly depleted in many cases because of not being handled under the right kind of forest management. Might I go on—

The CHAIRMAN: Are there any further questions before Dr. Wallace goes on?

*By Mr. Matthews:*

Q. Would you repeat that proportion that comes from wood lots?—A. One-third of all wood that comes out comes from wood lots.

Q. Including lumber?—A. Including lumber, including everything. Of course, some of it comes in the form of fuel.

*By Mr. Ross (Calgary):*

Q. What would the 10,000 men you speak of be doing to be employed in this way? What would the nature of their work be?—A. They would go into those areas that the provincial government feel are accessible, merchantable areas, and under the supervision of trained foresters would clean up, mark the trees that should be cut and used, in order to maintain the structure of that forest; push back roads further into the limits so that whoever it is that is operating, the private operator, can get back far enough to cut in the right way instead of cutting from the face, and so on; where necessary do something to the rivers which might be used for logging, for carrying down the logs and so on.

Q. Spraying the trees?—A. That might also be the case so far as the parasites are concerned.

*By Mr. Castleden:*

Q. In the light of what you have said about one-third of the wood coming from wood lots, it might seem justifiable to arrange for more attention and instruction to be given in the operation of those wood lots.—A. It is a very fundamental thing. The only way in which that is being done at the present time is by those communal forest areas, those municipal forests and county forests that have been established here and there with the assistance of the provincial and federal governments, in order to show how best to retain them. Of course, the main trouble, as one sees it, is that cattle range into those wood lots without let or hindrance, and gradually the forests come down. They have to be protected in order to maintain the forest growth.

Q. Well, then, instructions along those lines should be made available?—A. Yes.

Q. Acceptable to all those who are engaged in that work?—A. Quite so.

*By Mr. McNiven:*

Q. By wood lot do you mean natural growth or cultivated?—A. It is usually natural growth that is left, not cut, on the farm; very little of it has been replanted.

*By Mr. Matthews:*

Q. There is one thing I am not quite clear on. Do you mean to say that one-third of all the lumber used in war budgets comes from wood lots? It is hard to believe.—A. That is the statement. I do not want to get in wrong with Mr. Matthews or the reporters here; I want to be absolutely sure of my facts, and I am quite sure. I can get it for you, not now but when I have time to sit down and look it up. The wood lots amount to a very large part of our total forest areas, merchantable forest areas. You have to think of our forests, although there are 700,000 square miles in Canada, it is only the edge of it that can be used at all at the present time in a merchantable way, and the agricultural

territories stretch out into it, with the wood lots remaining a very large part of it. I do not think I can get it for you right now, but I will check it up if you will give me a little time.

Q. That is all right.

*By Mr. Quelch:*

Q. You did not say that applies to lumber only; it applies only when you take into consideration fire wood, pulp, and everything.—A. All kinds of wood.

The CHAIRMAN: Are there any further questions before Dr. Wallace goes on to another phase of his subject?

*By Mr. Adamson:*

Q. Did you mention anything about the value of the wood lot to provide ground water and fertility of the soil on the farm?—A. No, but of course that comes into the picture of the use of our streams. There is no doubt at all that in getting back to a normal stream flow, which is important from very many standpoints, particularly power if power is to be developed on the stream, you have to restore the flow which was normal at the time before man came and interfered. You get back to that best by maintaining at least the head waters forested, and there is always a fair amount of little streams that come out of wood lots and protect the average flow in that way.

Now, may I get back to the matter I mentioned, which is the memorandum from the Forest Resources Department, Mines and Resources:—

One-third of all the wood used in Canada . . .

Now, there is where I have perhaps made my mistake. I am sorry. May I have that changed?

The CHAIRMAN: Yes, you may change that.

The WITNESS:

One-third of all wood used in Canada is ordinarily taken from farm wood lots. Since those small forest areas are extremely accessible and the revenue derived from them is of great value to the agricultural part of our population, obviously special attention should be directed to improvements in wood lot management.

I am very glad you raised that, Mr. Matthews, because I had it wrong in my mind; it is one-third of the wood in Canada, one-third of the wood used in Canada is from wood lots.

*By the Chairman:*

Q. Does that include all wood materials used in Canada?—A. All wood materials used in Canada; of course, our export is large.

*By Mr. Purdy:*

Q. Would you say that would be privately-owned lots as compared with Crown lots, or do you think there would be a further breakdown in privately-owned lots?—A. Well, I would assume that statement referred to farm wood lots.

Q. Not privately owned?—A. That would be my statement, but I would suggest if you want to get into details on this matter to ask Mr. Roy Cameron to appear before you. He will give you exactly the details on some of these statistics, because they are supplied by his department.

*By Mr. Martin:*

Q. I was not quite clear on what you said at the beginning of your statement when you said that the execution of the plan or of the details of the project was a matter not for your body but for the kind of organization which I understood you to say you had suggested should be set up?—A. Yes.

Q. Now, you had suggested it to whom?—A. To the government, through the Prime Minister.

Q. You are not ready to suggest what you have suggested?—A. Well, we were set up to advise the government through Mr. Mackenzie, and now through the Prime Minister, as to the ways and means by which things could best be done in so far as reconstruction is concerned, that is, machinery, and backing that must be data material which would justify the kind of thing we advise. We are not at all a body, and it has never been intended that we should be a body, to execute anything at all; that is not our function.

Q. What I had in mind was this, Dr. Wallace: some members of the committee, including the chairman, yesterday were of the opinion that sooner or later there should be set up a national body to carry out a scheme of public works to provide emergency employment and so on, and I was wondering if that was the sort of thing you envisaged.—A. Well, I should like to come on to this matter always subject to reservation by Hon. Mr. Mackenzie that I am not speaking out of court; but would you leave that matter until we have dealt with the other resources? Surely, I should like very much to discuss the matter in a general way with you because that is helpful to us as it is, I would hope, to you. It is the crux of the whole situation, but we are given a certain function and we act in a certain way through certain channels, and I would leave it to Mr. Mackenzie to decide how far one might go in specific discussion of the matter. May I go on? I do not want to get, gentlemen, too much into detail, but rather to keep it to the general picture if I may, because I think it will be more helpful to us all.

With regard to mining, there too we have very full data material, and there are two problems in mining which I might simply outline. You know them very well. One is: it has not always been found possible, indeed it has very seldom been found possible, in the setting up of a mining area, a mining community with all public utilities and all the cost including capital investment, to maintain much of the structure after the mine was worked out; it has simply been scrapped and people have gone elsewhere. Now, we realize there are places where you cannot do much, they are mostly in somewhat inaccessible areas in the north and very far removed from transportation; but we would emphasize the fact that not enough thought has been given in the past to see whether you can consolidate a community of that kind so that in part it could maintain itself after the mining resources have been worked out. There is a large capital investment that should be saved as far as possible, a capital invested in morale, because the breaking up of a mining town and the scrapping of it is a matter of some serious consequence in morale to the people who have been involved in building up their homes there. There are possibilities in places in cooperation with agriculture and in forestry particularly of doing things.

May I point again to what Quebec is doing down in the Gaspé Peninsula, a somewhat similar situation to mining, with subsistence farming down there and fishermen, where they have established communal forests, operated by trained forestry men, from which these farmers and fishermen are permitted to cut so much wood in the right places so as to maintain these forests indefinitely and market them cooperatively and so on to derive a certain amount of their income which makes perhaps just the difference between subsistence and something much better than subsistence. Now, there is that constructive work that is being done in many parts of Canada to maintain our forest resources, but at the same time we have not thought much about that in most of our mining areas, and it is necessary to think very seriously now about maintaining the structure of a settlement once it has been established if it is at all possible to do so. That is one of the things we should like to urge very strongly to the government as an over-all policy in connection with new mining developments or even old mining developments that are part of the way to completion to-day and perhaps in ten or fifteen years it will work itself out.

Twenty years is a fairly long time to give to mineral resources; they work themselves out in that time on the average. Of course, there are some exceptional cases such as Sudbury, in Canada, but they are exceptional cases. Twenty years is practically the limit of time on which you can count on a mineral resource; it will be wiped out in one particular area in about that length of time. It is a very short time, and is particularly heavy in total investments, which means you must have a substantial return, financially and otherwise.

The second matter is this, that we are very much concerned about the whole mining situation. We are all thinking about unemployment after the war; but the way things are working in mining it is going to work against employment after the war, rather than for it. In other words, the danger is that we will be in a lower level of employment in mining than the normal one when the war is over. That is a serious matter. The reason is this: that gold has gone into the discard; it has no priority. That means that the gold areas are being gradually disorganized. There is no money for gold mining, prospecting or developing up to the stage of an operation; consequently no new properties are coming up. The base metals, that is to say nickel, zinc, copper, are being over-stressed to the extent of unwise development of some properties to-day, because of the needs of the war. Now, there is nothing else to be done about that than to do it; but they will be fairly well exhausted and, again, no new properties of any consequence are coming up. Then, there are the strategic minerals: tungsten, molybdenite, magnesium, chromium and so on—especially magnesium to-day—some of them will come along, but the security of these minerals after the war will be a great question. Therefore, especially with the war minerals, one would hope we could maintain them with the development of alloys in which are used minerals such as magnesium, duralumin and things of that kind. Unless we find some way in which to maintain that type of mining we are going to be in real difficulty.

Now, what is needed there we are very clear about. First there is the training of men just as soon as they are available as prospectors; and it needs a new kind of training. A great part of the new discoveries to be made in Canada are under clay to-day, and not on bare rock. All of the bare rock has been gone over more or less thoroughly and discovery under clay is a different matter from that of ordinary discovery on bare rock and it needs a new technique. That training needs to be given. Men have to be available. The second need is this: there is practically no incentive to put money into mining enterprises to-day. It is a very ticklish sort of business. It is very speculative. Nothing in the world could improve it. There is nothing better than the speculative, it is inherent in the whole problem. And it needs a return to justify putting money into that, rather than putting it into a dominion bond or something else.

Mr. MARTIN: You use the word "mining"; would you care to say whether you intended the application of that term to be limited to gold mining; or, did you intend it to apply to mining generally?

The WITNESS: I am applying it fairly generally. It is true that I put the emphasis more particularly on gold mining, but it applies to other types of mining as well; and it applies to base metals also. There is not a great deal of money going into new developments, because if it were not found now it would be after the war in all probability; and the extent to which it could be developed would depend directly on the available market. There is one thing that would help, and indeed the governments are thinking about this, and that is to make it relatively easy through taxation to induce money to go into mining. If taxation is high it works two ways: it keeps people from putting money into mining which is speculative; and private enterprise needs some assurances that it is going to make money, because it knows when it goes into it that the risks are high. The second is this: the ore is simply that kind

of mineral that pays being got rid of from the rock. There is no particular level of content, percentage, that means ore at any time; it is entirely an economic matter. The more you put into costs, such as taxation, the less there is of ore in that particular body; you are cutting down the actual ore body itself. But once it is mined—that is the rest of it is mined—you cannot get back to the low grade metal again, because it will never pay to get it out; it has to be mined with the others. So that every bit of additional taxation put into the mining lowers the actual amount of ore that Canada has that can be used. That is not always distinctly understood, but it has a bearing on development, and it is a fact which we may as well recognize.

And now, we need to take very rapid action in connection with this extremely serious matter. You may say that we do not know what gold is going to be after the war. We do not; but I think we can be fairly safe in assuming that gold will not occupy a secondary position from the monetary standpoint after the war. I am not speaking as an economist, I am just looking at the picture with what I think is fairly clear common sense. Gold bullion will distribute itself again all over the world and still remain the medium of international exchange. It has done that in the past, and I think it will continue to do so. The fact has been at least that the history of the price of gold has always been an upward one and has never been a downward one; in the past it has always been up. I do not think the likelihood is that the trend will reverse itself.

These are two things about mining that are particularly important it seems to me, things that we are attempting to emphasize in a general way. I am not dealing with any specific problem. The practical problem is the training of men to go out into the field, whether by government support or by private companies—the private companies will do it if they see a chance to make some money out of using them. The whole thing is tied up together. But there is no doubt at all, with re-education, given fair inducement, that a very considerable number of men could be added to our prospectors group in Canada; which, by the way, is a diminishing group to-day; and at the same time a group with a great deal of enthusiasm, having an association of their own across the country which operates to-day to give some general information to prospectors in the things that are needed to-day; and a group that we would be very much worse off in Canada without. I speak from long experience of these men, because I know them well. They represent a pioneer element in our country, and I may say for them that they have given far more to the country than anything they have ever got out of it in the way of financial return. I think we should all agree as to that.

Mr. MARTIN: There was a suggestion made in the House of Commons during the last few weeks that prospecting should be more under state supervision than under private supervision or private auspices; what would you say about that?

The WITNESS: I think the training of the men and perhaps training in the field for a period of time can best now be done under state supervision; but after that—and one would hope the period would not be a very long one—they should be available for private companies as far as private companies need them. I think perhaps they are the best ones, once one gets beyond the stage of training. I am not very happy about government enterprise as a continuous operation in mining. It is very speculative. It takes a lot of initiative and risk; and is not just the kind of thing that governments, may I say in my opinion, do best. So I would like to see the prospector go back as soon as possible to the private company, financed by them, but it may very well be that under certain conditions governments can take a certain interest, a small interest, perhaps, but some interest. That might be worked out. They have done so during the war, and it may be necessary to do so to some extent in the coming days of peace.

The CHAIRMAN: Are there any further questions any member of the committee would like to address to Dr. Wallace?

Mr. McNIVEN: Dr. Wallace, have you any recommendation to make on how this training should be given; have you gone into that side of it yet?

The WITNESS: Yes, that matter is going ahead and the provinces are already thinking about this quite seriously. The province of British Columbia has taken the initiative in this matter. The province of Ontario I am sure is thinking about the matter. We, for instance, at Queens are setting up a prospectors' course of some eight weeks when the time is ripe for them to come back; and so it will be generally. They will be financed presumably under the Vocational Training Act, and they will get their maintenance during the time of their training. When it comes to the field, the government—provincial or federal—will in all probability handle them for a time, with some arrangement later for private corporations to utilize these men. I would not like to go into that at the present time because it is rather intricate; but no doubt a reasonably satisfactory arrangement could be made.

Mr. McNIVEN: And I presume the immediate classes to be given this course of instruction will be the old chaps who have been doing this work for years?

The WITNESS: Oh no, we are thinking of the men coming back now. They are beginning to come back in considerable numbers. We are thinking mainly and primarily of the returned men, but we are not excluding the other men who want to train in that field. It is to a considerable extent a returned man's problem.

Mr. CASTLEDEN: Would you care to make a statement with regard to the possibility of utilizing the iron and steel industry in the reconstruction field after the war; what is Canada's place in that picture?

The WITNESS: I cannot answer your question as to extent or amount. There is a good deal of question as to how far other metals are going to come into the picture. But I might say this, that in the ferro alloys we have had to import in large measure from other countries. Those who know that field best think that our cheap electric power, which will be available in considerable quantities when the war is over, indicates that we can fairly reasonably go into the ferro alloy industry—that is iron, with such metals as tungsten, molybdenum, chromium and so on; giving special types of iron products. It has been developed rather more in the Scandinavian countries with their electric power than with us. And now, with our greater development of electro-metallurgical and electro-chemical industries through power—and they are being very, very rapidly developed in this country—we would hope that the ferro alloy industry would develop quite substantially. As far as iron itself is concerned, of course, we have to depend to a large extent to what we can get. It is a question of iron resources if we are going to develop a large industry in the future; that is, if Steep Rock develops into a large proposition, that would mean a great deal. And that development might be either at the head of the lakes or down the St. Lawrence so as to add to it some of the Labrador ores, and utilize power which is now in such large measure available; and also proximity to the export market. The heavy industries are in a field by themselves and will have to be considered separately.

Mr. MARTIN: Is there likely to be any reduction in the use of nickel in relation to steel in view of developments such as you have referred to. I understand now that they have new processes by which they are not using any nickel in the alloy at all.

The WITNESS: I put a great deal of faith in the initiative of the scientific arm of International Nickel of Canada. What they have developed in the way of new processes since the last war has been amazing. I do not think

they will be less alert in the days after the war. We have to depend so much on scientific technical research for new methods, with great thought to new uses. I think that International Nickel, and bodies of a similar kind, with strong research organizations, will be alive to the future. No, I cannot answer the specific question, Mr. Martin, at all. When we come to power and all that it means in water, perhaps we have not considered the water question in Canada except with respect to certain storage developments which have been undertaken—we have hardly begun to explore our water resources, and they are of extremely great value.

MR. BLACK: Before you touch on power, what attempt has been made to study the possibilities of coal in relation to the production of chemicals, dyes and things of that kind?

THE WITNESS: We have not done anything on that. We have not gone into the broad problem of coal in any way.

MR. McNIVEN: Are there any subcommittees of Dr. James' committee dealing with that?

THE WITNESS: No. It was really our thought that we could not get at it and do anything with it worth while.

MR. McNIVEN: Did you have anything in mind?

THE WITNESS: Yes; but may I point out to you that our business is not the detailed investigation of any particular resource; our business is to advise the government as to how to set up the type of machinery to do the work. Our problem is really to measure the general problems of the country.

*By Mr. Black:*

Q. Would it be within your jurisdiction to advise as to the possibilities of chemical investigations with respect to coal?—A. I think if we saw a clear-cut opportunity, if we knew well enough what to do, we would. I have great faith—and again I speak of that area that I know best—in the softer coals of the west and their ultimate utilization. But whether that time is near or far away, I am not prepared at the moment to say.

*By Mr. McNiven:*

Q. Do you know if there is in Canada any chemical industry or dye industry based upon coal products?—A. I do not know of any. I do not know whether the coal tar that is developed in Canada under the ordinary process of gasification is used by any industry in developing dyes. I cannot tell you. Frankly, I do not know that. I would be rather surprised if some of it is not done, but I do not know. I will find out about that.

THE CHAIRMAN: Are there any further questions before Dr. Wallace goes on to water power, and so forth? If not, you may proceed.

THE WITNESS: The only questions there that I wish to discuss are the rather wider questions. We now have nine and one-quarter million horsepower developed in Canada. Next year we will have 10 million horsepower. It went up very rapidly, as you know, last year because of the demands. At least one-third of that is in war industry and that will be available after the war. To me one of the most hopeful things is that we have cheap power easily available in Canada after the war. Cheap power is one of the great incentives to industrial development, and one would hope that cheap power can be used, and used widely, in the development of industrial life in Canada in competition with other countries in order to keep costs low in our Canadian products. Nearly a half—more than a third—of what you might call easily available power is now developed in Canada, but not more than one-fifth of what will some day be available is yet developed, so we have great resources ahead of us in Canada as it is possible to go further and further back to more

distant power sites. What is needed is to treat all our rivers that are of any consequence at all in such a way that we maintain the regular flow of the rivers, not only in order to conserve the soil, as you saw in the Ganaraska situation a couple of weeks ago, but also in order to maintain the power level and the right type of fish habitat level in these rivers. A great deal of small work in the way of very simple dams will be done throughout our river systems of Canada.

Some of our larger rivers need wider treatment, such as the Saskatchewan, where it is necessary to look at a picture like that as a whole and all the needs that river is being put to; for instance, power in the head waters which are to some extent now de-forested, the eastern slopes of the rockies becoming a somewhat serious problem, and irrigation further down the river, and the water for the marshes for the muskrat right down immediately west of Lake Winnipeg where the Saskatchewan river flows into the lake. These are needs and uses which might come into conflict, and it is necessary to have an over-all type of administration in a large river running over three provinces such as that. We are advising definitely that be taken under control by a body looking at the whole picture so as to develop the best uses of a river of that kind, and that will apply to other rivers as well in Canada.

As far as power is concerned that may be used there are two things that I think I probably have mentioned before. I am one of those who hope that you can get a good number of smaller industries into the rural towns. I am a great believer in the small rural town, in the amenities of life and the right kind of balance of living that one has in that kind of town, as against the very large city which we have seen grow up during this period of industrial development. You can do that by taking thought of a number of things as has been done in some of our districts in Ontario, by cheap power and the amenities that cheap power will give to the rural community life of the village or town. The second thing is one which is much before you, the question of rural electrification of the farms. One cannot do that on a basis which is quite economical in itself. In other words, one does not get a return from the farmer adequate to meet the cost involved. That is a public service in a considerable measure. It is a public service like public health and will, if it is to be done, have to be paid for in part out of public funds. I think that the investigation in Manitoba, which you know about, indicated that about \$650 was the capital investment per farmer in the picture for them where the farms are fairly widely distributed. It is not the most economical picture. There will be other places where it might be cheaper than that, but we look on that as the cost per farmer of capital investment apart altogether from the cost of the power.

*By Hon. Mr. Mackenzie:*

Q. Is that published yet?—A. Yes, and it is an exceedingly good report.

*By Mr. Ross (Calgary East):*

Q. What is that figure again?—A. \$650.

*By Mr. Castleden:*

Q. Could you give us this information: has any survey been made to show those agricultural areas which are close to large power projects? You gave us a certain favoured area. I was thinking of such parts as the Niagara peninsula. What is the cost of that as compared with what it would be in Manitoba? I think a very valuable survey for this committee would be if the agricultural areas of Canada were mapped out to show, in some form of shading, in which places rural electrification could take place, say at a cost of \$200, or say it is \$600.—A. I believe the Ontario Hydro Commission could give that right away. I have their reports.

Q. That is for Ontario?—A. Yes. They have something like 70,000 farmers having electricity led to their farms in Ontario.

Q. Something of a national scheme would be a very valuable survey for this committee.—A. The Manitoba survey gives that in part for that particular area, and advises the rate at which it should proceed and the terms in which it should proceed.

*By Mr. McNiven:*

Q. Is that capital cost you refer to made up of the transformer?—A. Yes, the transformer and the lines.

Q. The transformer is quite an expensive piece of equipment?—A. Yes.

Q. And I believe is necessary for each farm?—A. Yes, it is. I do not know what they have got the transformer down to now, but it is a great deal cheaper than it was. But this is the total including the lines as well.

*By Mr. Matthews:*

Q. Would that \$650 not be based fairly generally on the demand of the farmers?—A. I think the minimum is \$3.50 per month, and they would expect a great deal more than that on the actual power cost.

Q. That is not the point. Will the cost not depend a good deal on the number of farmers who ask for it?—A. Yes. That is true. They speak about a certain percentage of—what is the technical term that is used, Mr. Cameron?

*By Mr. McNiven:*

Q. Customers per mile?—A. No. The percentage of total.

Mr. CAMERON: Saturation?

The WITNESS: Yes, the percentage of saturation.

*By Mr. McKinnon:*

Q. You mentioned Manitoba and also Ontario where we have the Hydro Electric, and the cost per home in Manitoba. How would that compare with prices where they have private plants such as in the province of Quebec where, I understand, the prices are a very great deal higher?—A. I was speaking only of the cost of leading into the farm, not the cost of power.

Q. You were not speaking as to the cost of power?—A. No. That \$650 is only the capital investment leading into the farm, making the power available.

Q. Let us go along a little bit further, after the capital cost had been met; it is there, of course, that the question of cost on the average comes in. It would be possible for Manitoba or Ontario to go ahead and electrify many of our farms. Would the same thing apply in Quebec where it is under private initiative? Would not the cost be prohibitive?—A. The Shawinigan Power Company is already doing a certain amount of rural electrification as a private company. I do not know how large that amount is. In any event this is something that the state has to share in with the farmer. I have not any doubt; and if the private cost is heavier, the state would have to share so much more, if it is going to be done.

*By Mr. Martin:*

Q. Would that mean much by way of post-war employment assistance?—A. No. This will not give much in post-war employment assistance. This is really a longer term type of investment, to consolidate farm life.

*By Mr. Quelch:*

Q. It would bring about the rehabilitation of agriculture in the west?—A. Yes, that is so.

Q. Would the cost of power from coal be higher than the cost of power from water?—A. Well, I asked the people who went out west on our committee—I could not get out on that little trip—to think particularly about Saskatchewan and the coal situation in Estevan, and see how far it was possible to use the coal for rural electrification. I think they found that the Saskatchewan government had not had any very definite investigation into that matter as yet. Perhaps Mr. McNiven can assure me on that matter. But they did not get much information on the question of the possibility of coal. The only statement that was made at all was that they thought it would be possible to use soft coal for rural electrification.

*By Mr. McNiven:*

Q. The Dominion Electric has had a large plant established there for at least ten years.—A. They have not done any rural electrification, have they?

Q. Yes. There are transmission lines emanating for a distance of 75 or 100 miles.—A. To farmers?

Q. Well, to the villages.—A. And to towns?

Q. Yes. And occasionally, where the farmer requires it, a system has been installed; but it has been costly.—A. Oh, yes.

Q. I mean, as to overhead. The capital cost has been great.—A. Yes.

*By Mr. Quelch:*

Q. Would you say, with regard to Alberta, that it was more economic to use hydro than to use coal?—A. Have you not the position in Alberta that there is a kind of balance between the two in the present tie-up? At times when the coal is more economic to use, it is used by a standby station and pushed into the system; and when it is more economic to use hydro from the Bow river, hydro power is used. I think that adjusts itself perhaps on an economic basis. But I think in Edmonton at times power was pumped into the system from the standby coal plant.

I think, Mr. Chairman, there is not much more that I want to say. There is the question of wild life, of course.

*By Mr. McNiven:*

Q. Before you leave the point, you made some remark with regard to the Saskatchewan river in particular. Did you indicate the possibility of navigation?—A. We had not thought about that. But I think any board that was set up—suppose it was the Saskatchewan River Board—would think about that possibility as well. There are pretty heavy shifting sand banks, as you know. It is not an easy problem.

*By Mr. Quelch:*

Q. Have you investigated the question of irrigation, or does that come under Mr. Mackenzie?—A. That is Mr. Mackenzie's committee, yes. We only got into the water power end—mainly power and those fields.

The CHAIRMAN: Are there any further questions to be asked of Doctor Wallace? We are in a very interesting stage.

*By Mr. Adamson:*

Q. May I ask if your committee made any study of the Utwatt report?—A. No, except having read it.

Q. —and its application to our problems?—A. I think we would leave that to Mr. Mackenzie's committee and the committee on housing, because it is not quite so much in our particular picture; it is a question of the disposition of land that might be needed for community building purposes. I do not think it is quite so much in our set-up.

*By Mr. Castleden:*

Q. Has any study been made of the probability of using oil, Canada's oil resources as a power source?

Mr. McNIVEN: Find them.

The WITNESS: The first problem is to get our oil resources. Now, the federal government has already by the new regulations in the budget shown the disposition to encourage the development of oil, that is, exploration of oil, which I should have mentioned at the time I discussed mining. If that could be widened so that any development or exploration work that companies undertake would not be subjected to taxation, just the same as is being done with oil, that would be of great assistance in the whole question of prospecting and developing new fields. We have not, I should think, nearly enough of an oil resource in Canada yet known to justify any large power utilization of oil. It is a very substantial and a very precious commodity and it is used for transportation in the internal combustion engines. That seems to be the most fundamental use of that particular resource.

Q. Does your information contain reports on the tar sands of Alberta?—A. Well, it is an old and familiar question to me. We know that there are 100 billion barrels of oil available there some day, and I hope to live to see the day when it becomes one of our great fundamental industries of Canada. It will be a very large industry, but we have lived through periods of expectation for a number of years, with research work, but so far have not gone over the top. We will get over the top, how soon they start, though, I do not know. Governments have helped out in every way they could in the matter, because it is one of our large potential industries.

*By the Chairman:*

Q. What is holding up the reaching of a conclusion, in your opinion?—A. It is simply a question of cost; it is not economical as yet; it costs less to obtain the same commodity in other ways through the crude oil industry.

Q. Have you mastered the technical question?—A. I think pretty well; that has been pretty well worked through and completed over a long period of years. It is a very difficult matter.

*By Mr. Martin:*

Q. What about natural gas potentialities, doctor?—A. Well, we are still wasting a large quantity per day in the Turner valley, I hope it is less now, but it was a large figure when I sat on the commission some years ago.

Q. Why is it we cannot use at the present time any large quantity of that?—A. We cannot establish industries sufficiently economical to use that material; carbon black and benzine are two possibilities. I think a certain amount is now being done in that field, but there is no substantial industry there. There is still a very large amount of gas not being used. That is one of our tragedies. I speak as one who sat for three years on the Waste Gas Commission of the Turner valley.

Q. Is that waste found in other fields?—A. No, except the Turner valley.

*By Mr. McNiven:*

Q. Turner valley is the only field of its kind in the world?—A. It is the only field with very light gasoline; of course, they have some heavy oil now.

Q. It is really a naphtha?—A. Yes.

Mr. HILL: Already distilled.

*By Mr. MacKenzie (Neepawa):*

Q. I wonder if Dr. Wallace will enlarge on the possibilities of the Saskatchewan river? During the debate it was classed with the T.V.A., although it is hardly a comparable situation. T.V.A. is developing large power resources, also navigation and irrigation. They have also been producing fishing areas along the river where it overflows the land.—A. I spent a couple of weeks at the T.V.A. last summer studying that whole question. I do not think one could get out of the Saskatchewan river quite what they are getting out of the Tennessee river. The situation is very different. There are not the same power possibilities to the same degree in the Saskatchewan river as there is in the Tennessee valley, I would say, although there are possibilities upon the river that have been located from time to time. I look on the Saskatchewan river as a fundamental power resource at the head waters, power resources of a different kind, because the water that comes down there is from melting snow which is very seasonal and consequently one has to maintain the structure of the forest protection to the very limit in the area; but it is seasonal and it could only be built up to a certain definite maximum limit. There is no doubt at all that there will be much larger irrigation development from the Saskatchewan river as time goes on, and one would hope that the muskrat possibilities might still enlarge considerably in the bottom part of the Saskatchewan. There has always been the question, as you men know, of getting the waters of the Saskatchewan down into lake Winnipegosis and through into lake Manitoba and down the Little Dauphin river, and develop power much nearer to Winnipeg. Just recently a gentleman came in to see me and our committee with a scheme of that kind, which has been long thought about as a possibility of power development nearer than the Grand Rapids up on the Saskatchewan.

*By Mr. McNiven:*

Q. Are the Grand Rapids in Saskatchewan?—A. No, in Manitoba, just where the Saskatchewan flows into lake Winnipeg; there is quite a drop there.

The CHAIRMAN: If there are no other questions to be asked of Dr. Wallace I want to express the thanks of the committee to him because of the very lucid statement he has given us. I think you, Dr. Wallace, have given the committee much food for thought in the future.

Mr. MARTIN: I should like to know why it is we are wasting so much valuable time. Yesterday we adjourned at a quarter after twelve.

The CHAIRMAN: We did not, and we are not wasting time. We may as well come down to the crux of that; we are not wasting valuable time. This is a committee set up to carry out its function in accordance with the terms of reference. This committee is not an administrative committee; it is a committee of inquiry.

Mr. MARTIN: With all due respect, you did not let me finish my statement.

The CHAIRMAN: The statement was not correct.

Mr. MARTIN: We adjourned yesterday, I think, about twenty minutes after twelve.

The CHAIRMAN: No, we adjourned yesterday at a quarter to one.

Mr. MARTIN: My clock was wrong, then. We are dealing with an important problem and we are sitting two days a week. Our session will be over before we get through and we shall be exactly where? I cannot see why we cannot make a good deal more progress.

The CHAIRMAN: How many days a week do you want us to sit?

Mr. MARTIN: This is a big problem.

The CHAIRMAN: Of course it is.

Mr. MARTIN: We have many things to go into.

The CHAIRMAN: Last year we sat here sometimes for half an hour waiting for a quorum to put in an appearance in order that we could start our meeting. There is no question of that and I take exception to the statement that a committee set up by the House of Commons is wasting its time because it is making studies. If we were an administrative body we would have to function differently; but we are a body representative of the people, with instructions to report back to the House of Commons who have the will of the people to keep in mind. That is our chief function, and we are at the moment in the stage of inquiry.

Mr. MARTIN: I am not suggesting anything Dr. Wallace has said is a waste of time.

The CHAIRMAN: What is the waste of time?

Mr. MARTIN: I am suggesting to adjourn at twenty-five after twelve when we might sit to one o'clock is a waste of time.

The CHAIRMAN: Would it be a more economical use of time if the steering committee, not knowing how long Dr. Wallace would take, had brought somebody else here and kept him waiting so that we might have twenty minutes or so to hear him before we adjourned? That would not be economical and, Mr. Martin, you know it would not be. We have a witness here, Dr. Wallace; I am surprised a little that he has not had more questions asked of him relative to some of the matters that he urged before us, but that is a matter for the members of the committee to decide in their own judgment, but the steering committee in arranging meetings of the general committee cannot bring in a whole group of witnesses here like they do in court where witnesses are brought under pay and sit around waiting to be called. We could not do that at all with Dr. Wallace and Mr. Gray and Mr. Cameron and others who are busy, busy men and who come before us not to listen to what other witnesses say but to give us evidence of their own. So a steering committee in regulating what is to take place in a committee cannot bring a large number of witnesses and have them waiting around until the witness giving evidence is finished.

Mr. MARTIN: Mr. Chairman, obviously I am at fault and I accept it, but my remarks were misunderstood. What I had—

The CHAIRMAN: If I misunderstood your remarks, I am sorry.

Mr. MARTIN: Dr. Wallace made an important statement, for instance, on the question of gold. There are gentlemen in the committee who regard his observations and those of Dr. James as extremely important, and are taking serious issue with them in the house and outside. It seems to me that now is the time when members of the committee, who feel the point of view of Dr. Wallace is wrong, should take the opportunity to discuss the matter with him. Dr. Wallace places great value on the future use of gold. I should say there are members of this committee who should take the opportunity when Dr. Wallace is present to explore the question with him. This is the time to thresh these things out, not ex parte, when Dr. Wallace and others are not available. Those are the things I had in mind.

The CHAIRMAN: It is up to the committee.

Mr. QUELCH: Mr. Chairman, I understood Dr. Wallace to say he was not exploring in detail or making a survey of any industry at this time as to its use. Of course, if we are going to discuss gold we are getting into the question of the gold standard. Is it your desire we should discuss that at this time? I hesitated to do it because every time I have raised a question about matters like that in this committee I have been called to order on the ground it would be discussed at a later time. I would be very glad to discuss it at this time. In the past you have ruled it should not be introduced and Dr. Wallace has said he is not going to discuss in detail the operation of any industry at this time. I take it this is not the time now, but I would be only too pleased to go into the matter now if Mr. Martin is right in his observation.

The CHAIRMAN: In my opinion you are right. If we entered into a discussion of the gold standard now I am afraid we would be defeating the whole object of the committee, because we would simply have a difference of opinion. I imagine that we could just raise our hands now and find out very readily just who would favour a continuation of the gold standard and who would not; some time it will have to come up.

Some time we may have to make a recommendation that the gold standard should be maintained after the war. I do not know that now is the proper time to do it; but I do think that Mr. Martin had that actually in mind when we were led into the discussion which has just taken place.

Mr. MARTIN: No. What I had in mind was this: the apparent nature of the campaign that is now being publicly reported. There is a complaint that is being made that suggests that Principal James and Dr. Wallace are part of an international conspiracy to put into the hands of certain governments a policy which some generally regard is not in the interests of the state. That statement was made again last night in the House of Commons, and we now have before us one of the gentlemen who has given us some of his views about the future of gold; and it seems to me that this is the place to thrash that matter out; and we should let some of these gentlemen who are making these allegations ask Dr. Wallace about them.

Mr. HILL: He said "No".

Mr. MARTIN: Is he a member of one of these hidden committees trying to impose their views on the government? Last night the same thing was referred to in the House of Commons; and I may say that the matter is also referred to in an important publication that came out Wednesday of this week. I think this whole matter is very important; and now that we have Dr. Wallace with us I suggest it would be well to have his views on it.

The CHAIRMAN: Questioning Dr. Wallace as to whether he is part of an international conspiracy is an altogether different matter from discussing the material he is submitting to us; it is very, very different—

An Hon. MEMBER: I am afraid you have not got the point.

Mr. CHAIRMAN: I am saying, it is very different. If Dr. Wallace wants to answer any questions or make any statement in view of what Mr. Martin has said, as to whether or not he is part of a conspiracy, I am sure the committee will be very glad to hear him, if he wishes to make any statement on it. I do not know what publication you are referring to, Mr. Martin; whether it is really worthwhile taking any notice of it or not. What is the name of the publication?

Mr. JEAN: We have had Dr. Wallace before us to-day and he has given us a good deal of food for thought. And now we seem to have gotten away from the discussion of things pertinent to our reference. I have no objection to Dr. Wallace making a statement about his views on the gold standard, should he desire to do so, but I do suggest that we should confine ourselves to the subject matter of his report.

The CHAIRMAN: I think you are right there.

Mr. JEAN: Our discussion has gone from one matter to another, and I think we should get back to the original submission.

The CHAIRMAN: I am sure that if the committee desired to set aside a day for discussion of any matter that Dr. Wallace would be glad to be with us.

The WITNESS: As to a conspiracy, I am not aware that there is any. Sometimes one does nothing about these things oneself. I made a general statement of opinion which has no more value than the statement of anyone else; or much less value than a statement by some of you gentlemen here. I am not an economist. I do not know enough about the gold standard to give any authoritative statements to a committee such as this. I am very humble about things I do not know anything about; and this is one of them, very definitely. It is, I think, a matter in which economists themselves who are trained in the field have different viewpoints; and it would be rather a good thing perhaps, I would suggest, some time to get a selected group of economists to discuss this matter with this committee. They could make some contribution which I could not. I can only say this, that we have not yet seen a way adequately in which international trading, international exchange, can be carried on without a basis of gold. It may be that the way can be found and in that case gold would sink to a very subsidiary place. I am not one of those who think that will happen in any very short time. And now, that is simply the statement of a man who speaks purely as an ordinary citizen without any extra knowledge of the matter at all.

Mr. HILL: I think Dr. Wallace made that very clear in his statement; he said his views are based entirely on a reference to history. There is one question I would like to ask him for my own information; do you think that this government or the provincial governments would be warranted after the war in spending very substantial sums of money in the development of storage basins at the head of all of our streams which at the present time show runoffs to be excessive with the result that we are losing the normal runoff; would they be justified in spending money for large storage basins which at the present time could not be used for power development but which would be reserve water for future power development; and which at the same time prevent excessive runoff of surface water in the spring of the year?

The WITNESS: My answer to that question would be, yes. I am very fully convinced in my own mind that that is one of the constructive phases of the work to be done, under wise engineering conditions. As a matter of fact I think the province of Quebec, if I am not mistaken, has a commission which is doing exactly that kind of thing, and doing it in the public interest. I feel that we have to go a great deal further. Apparently there is already a considerable amount of development in some areas such as the river Thames, the Grand river; and there will be no doubt on the Ganaraska, and rivers of that kind. The whole picture of employment after the war is an aggregate of small things, of a great many small things scattered throughout the country; things which are of value from the standpoint of our future life. I think that will be one of the large developments.

Mr. HILL: What do you think about enormous storage basins in connection with the big rivers of the west? I mention them in contrast with the small storage projects of the type to which I have just referred. They go a long way toward maintaining humidity in the prairie provinces through the evaporation from large water surfaces—would not better results be secured from a number of small reservoirs?

The WITNESS: Not only that, but there is this other result, that the level of the ground water is raised substantially; and that is a fundamental need of our agricultural life.

Mr. HILL: You are right

The WITNESS: You take as an illustration, the water storages where private companies have to go back to-day into the far distant country. For example, there is the power company which develops power for Flin Flon on the Churchill river; they had to go away back to the other end of Reindeer lake, which is pretty far into the north country, to make a dam arrangement there for reservoir purposes.

Mr. HILL: That is what I wanted to know.

Mr. ROSS: Would not the planting of trees on the eastern slopes of the Rockies create the necessary reservoir?

The WITNESS: I do not think there is any doubt about that at all. That is one of the main problems in forestry to-day.

Mr. McNIVEN: Would not that have the effect of lowering the great lakes; and if that resulted, would it not raise an international problem with the United States as to the lake levels?

The WITNESS: I cannot answer that question.

Mr. QUELCH: I understood Doctor Wallace's argument to be based upon the premises that there might be after the war, and probably would be, a redistribution of the gold reserves of the world, and that we might be back on the gold standard, in which case the production of gold in Canada would play an important part; but that statement was based upon the premises that we might return to the gold standard. I do not think, Mr. Chairman, that you wish to discuss the gold standard at the present time. However, I may say this, that while undoubtedly there is a very strong body of thought trying to get the world back on the gold standard, judging from conferences which have been held in the United States and in London, nevertheless there is also a very large body of public opinion against a return to the gold standard, and I think the report of the London Chamber of Commerce, which is probably the greatest organization of its kind to be found anywhere in the world, and which has in it a number of very important men—men from the Bank of England, and other important institutions for instance—has taken a strong stand against a return to the gold standard. Personally my own feeling is that I should be very sorry to see a return to the gold standard because by so doing we would be introducing what I would call an artificial limitation, and we would be taking the first step toward another war by stirring up international friction. If we go back to the gold standard I believe it will be only a matter of years before our sons will be fighting another war.

The WITNESS: Might I ask one question: does it necessarily mean that one has to return to a gold standard in order to maintain the use of gold?

Mr. QUELCH: It all depends. The recommendation of the Pan American Conference was to have an international currency based upon gold with internal currency tied to it. If we have an internal currency tied to an international currency based upon gold we are very definitely upon the gold standard; we are introducing an artificial restriction; and we are placing a great impediment in the way of those countries which do not produce gold. It is all right for a country that produces gold, but what about countries that are not gold producers? What is the effect upon a country's production and upon a stable price level?

Mr. HILL: Your basis will cut down production.

Mr. QUELCH: Yes. But if you place your internal currency upon a gold basis, you are placing an artificial limitation to your currency. Instead of putting sufficient currency in operation to maintain your production at its maximum level, you are tying it down to your gold basis.

Mr. HILL: No. It is only a method of exchange.

The CHAIRMAN: Are there any further remarks on the gold standard or any related matters?

Mr. JEAN: I doubt very much, Mr. Chairman, if this is our job.

The CHAIRMAN: No, it is not. I am quite definitely of that opinion. I have given some leeway to the committee, however, on account of some of the feelings that have been expressed. But I am very definitely of the opinion that it is not going to help us in reaching our objective, in any way.

*By Mr. Adamson:*

Q. I notice that no discussion has taken place with regard to the St. Lawrence development. Does that come under the James committee?—A. There is a special panel of Mr. Cameron's committee on construction that is dealing with the particular problem from the standpoint of flooding and resettlement and so on. It does not come, directly as yet, under the committee of which I am chairman.

Q. Questions as to the development of power do not come under you?—A. So long as there is a committee panel on the specific St. Lawrence situation, we are not dealing with it. Mr. Cameron might be willing to say something about that.

The CHAIRMAN: Could you give us some information on that, Mr. Cameron?

Mr. CAMERON: Of course, the international section of the St. Lawrence and its development for power is a matter that is before the governments of Canada and the United States. In fact, it is actually, I think, before the United States. A treaty has been drawn up, and no action in this country is taken until the United States has decided what it is going to do about it. However, should something be done with that thirty-five mile section of the St. Lawrence from what they call the lower lake Ontario level, somewhere in the vicinity of Morrisburg and above Morrisburg too, down to and including Cornwall, there will be quite an extensive area in Canada affected by it, with respect to roads, railroads, villages and individual farms. It was thought that, in advance of such a possibility occurring, it might be well to have a study made on a regional basis on the possibility of resettlement, or whatever you might like to call, of that region, so that we would have a plan on which future development of that region could best proceed. That study is in its initial stages at the present time. An engineer from Toronto, who has specialized in that particular class of work, has been engaged and his report is expected some time next month. That would be just a preliminary report. Does that cover the matter?

The CHAIRMAN: Are there any further questions or suggestions?

Mr. HILL: I think we have met Mr. Martin's desire. It is now a quarter to one.

The CHAIRMAN: Mr. Martin might move the adjournment of the committee.

Mr. MARTIN: I simply want to say that the chairman and the committee, I think, have entirely missed my point. The point I have been trying to make is that Dr. Wallace and Principal James have done, I think, a great service to this country. But at every opportunity, men who think like Mr. Quelch—I am not saying Mr. Quelch personally—have grouped these people together and said—

Mr. QUELCH: I rise to a point of order, Mr. Chairman. At no time have I mentioned Dr. Wallace's name inside of the house or outside of the house.

Mr. MARTIN: I just said you had not mentioned them.

Mr. HILL: I move that we adjourn.

Mr. MARTIN: I expect all members of the committee understand what I mean.

Mr. Ross (Calgary East): I move that we adjourn.

The CHAIRMAN: After all, this committee is not either a debating society or a medium for taking out any feelings we may have with regard to other members for views they have expressed in the house or outside of it. Each member of this committee is a member of the House of Commons; and each member has the right, either in the House of Commons or any place else, to express whatever views he has. I have expressed my views, although I happen to be chairman; and I know that my views on industry and certain other matters, which I have stated openly, are not in agreement with those of certain other members of the committee. But no member who disagrees with my views has ever risen and said that I had no right to those views or to their expression.

Mr. MARTIN: I move that we adjourn, Mr. Chairman.

The committee adjourned at 12.45 p.m., to meet again at the call of the chair.













Gov. Doc.  
Can  
Com  
R

*Reconstruction and Re-establishment*  
*Special Committee*  
SESSION 1943  
(HOUSE OF COMMONS)

CA1 XC2

-42 R26

(SPECIAL COMMITTEE)

ON

(RECONSTRUCTION AND RE-ESTABLISHMENT)

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 6

THURSDAY, APRIL 1, 1943

WITNESSES:

- R. E. Gilmore, Esq., Senior Engineer, Fuels Division, Department of Mines and Resources.  
Dr. A. Cambron, Chemist, Division of Chemistry, National Research Council.  
Dr. B. R. MacKay, Senior Coal Geologist, Geological Survey, Department of Mines and Resources.  
Dr. E. W. R. Steacie, Director, Division of Chemistry, National Research Council.

OTTAWA  
EDMOND CLOUTIER  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1943





## MINUTES OF PROCEEDINGS

THURSDAY, April 1, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at eleven o'clock a.m. The Chairman, Mr. J. G. Turgeon, presided.

*Members present:* Messrs. Authier, Bence, Bertrand (*Prescott*), Black (*Cumberland*), Brunelle, Castleden, Eudes, Ferron, Gillis, Hill, Jean, MacKenzie (*Neepawa*), Mackenzie (*Vancouver Centre*), MacNicol, McDonald (*Pontiac*), McKinnon (*Kenora-Rainy River*), McNiven, Marshall, Martin, Matthews, Mrs. Nielsen, Purdy, Ross (*Calgary East*), Ross (*Middlesex East*), Turgeon and Tustin. 26.

*In attendance:* Honourable Senator John T. Haig, Chairman of the Senate Committee on Reconstruction and Social Security.

The following witnesses were present: R. E. Gilmore, Esq., Senior Engineer, Fuels Division, Department of Mines and Resources; Dr. A. Cambron, Chemist, Division of Chemistry, National Research Council; Dr. B. R. MacKay, Senior Coal Geologist, Geological Survey, Department of Mines and Resources; Dr. E. W. R. Steacie, Director, Division of Chemistry, National Research Council.

Mr. Gilmore, Drs. Cambron, MacKay and Steacie were successively called, examined and retired.

With the consent of the Committee, the non-members present were allowed to examine the witnesses.

Mr. Gillis filed a series of questions relating to coal by-products to which Drs. Steacie, Cambron and Mr. Gilmore supplied answers.

Dr. MacKay tabled a miniature map showing the coal fields in Canada and the United States. He made comments on same and copies were distributed to the members present. Additional copies were requested.

Dr. MacKay also tabled the following:

1. Specification for coal of the Canadian Government Purchasing Standards Committee.
2. Report on A. S. T. M. Standard Specifications for classification of coals.
3. Book of tables respecting coal mines in Canada.

The Chairman thanked the witnesses.

At 1 o'clock, on motion of Mr. MacNicol, the Committee adjourned at the call of the Chair.

ANTONIO PLOUFFE,  
*Acting Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

April 1, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11 o'clock a.m. The Chairman, Mr. J. G. Turgeon, presided.

The CHAIRMAN: Gentlemen, we have with us this morning two men from the National Research branch of the government, Dr. Steacie and Dr. Cambron, and two from the Mines and Resources branch, Dr. MacKay and Mr. Gilmore, to deal with the question of the utilization of coals for other than ordinary purposes. Dr. Steacie and Dr. Cambron will have a short brief, but it is delayed in coming; it will be here in a few minutes and then they will be ready to try to answer any questions which members of the committee may wish to direct to them.

There was no meeting of the steering committee this week. We had hoped that Mr. MacKenzie, who is president of the subcommittee on agriculture of the James general advisory committee on reconstruction, would be able to come before us tomorrow to deal with the studies of the committee on agriculture, but that will be impossible; although he is in town he is not able to come before us and so we had to postpone that until next week. I think the chairman of the steering committee is going to tell you that we will probably deal with questions that were discussed by us during the last session of reaching conclusions concerning methods and manners of dealing with various projects for the utilization and development of our coal resources in line with the resolution passed by this committee during the last session.

Mr. BLACK: There is one subject that I think we might give consideration to, and that is the subject of washing and purification of some of the poorer qualities of coal so they may be shipped and used to better advantage. There is a belief that some of the lower grade qualities of coal should have their b.t.u.'s raised by purification and washing so that they could be shipped and used to advantage. I think some study should be given to that or some investigation should be made into it.

The CHAIRMAN: Do you want to say something on that, Mr. Gilmore?

Dr. STEACIE: I might explain, sir, we are not in any sense experts on coal as coal, we are really only concerned with the commercial end of it, but Mr. Gilmore may have something to say about it.

Mr. R. E. GILMORE, Senior Engineer, Division of Fuels, Department of Mines and Resources.

*By the Chairman:*

Q. Did you hear Mr. Black's question?—A. Yes, I heard it. I can say the beneficiation of coal by different methods is quite important for Canada. It is being practised a great deal in the United States and is one of the factors affecting the competitive sale of coal in Canada when you want to set it against the United States imports. The Fuel Research Laboratories of the Department of Mines and Resources have been working on the beneficiation of coal by different methods of cleaning since 1927 and 1929. Starting about 1929 we obtained samples, large scale samples, from the bituminous coal mines in Nova Scotia. The producing coal companies there co-operated very effectively in collecting these samples, so that we now have a record of the coals from every large producing mine. We have departmental reports showing to what extent coal from each mine can be beneficiated and that is all on record.

It has not been published widely. Since the war began we have finished the survey of the bituminous coal mines in Canada, working from east to west.

*By Mr. Johnston:*

Q. Would that include the washing and oiling of coal and transferring it from the ordinary mine lump to briquet?—A. By beneficiation we generally mean sizing the coal, washing it by either the wet or the dry process. The oiling of the coal is a different thing and briquetting is a different thing, a different procedure.

Q. In your research you had in mind the possibility of shipping this coal say from western Canada to eastern Canada for the markets?—A. Yes.

Q. Just washing the coal either by the wet or dry process would not assist in the shipment of that coal to those markets.—A. It does not influence the shipping, no.

*By Mr. Black:*

Q. It would to this extent save 40 or 50 per cent of the cost of freight, and you make it possible for such coal to be used commercially where now they are not able to utilize it?—A. What I mean is, it does not change the freight rates at all, but it saves shipping so much ash.

Q. How would washing affect the ash content?—A. It reduces the ash content.

Q. What is the process.—A. There are two main processes. By the dry process the coal goes over a jig or table and air is blown through. The heavy high ash coal goes to one end or side of the washing table, and the lighter low ash clean coal goes to another and that is the way the separation is made. You can start with the Crow's Nest Pass coal, for example, with 18 to 20 per cent ash and you can get a clean product of various yields down to 15 or maybe 12 per cent ash.

*By Mr. Johnston:*

Q. Would that coal have to be crushed before you did that?—A. Not necessarily. You can wash it in different lump sizes. Then, there is wet washing in long troughs with a current of water with different solutions of salts in water or with different specific gravity mixtures of water and clay, water and sand, etc. In that process the coal becomes wet and precautions have to be taken to see that the coal is well drained or dried before you ship it.

Q. Does that result in an economic process whereby you can then ship the coal to compete on the eastern markets, or would that process be so expensive that it would not affect the market?—A. I believe the Crow's Nest Pass Coal coming down to northern Ontario was a washed product with a low ash content, a washed product which competed with American coal and had as low as a 7 to 10 per cent ash content.

*By Mr. Ross (Calgary):*

Q. What percentage would you wash out of the Crow's Nest coal?—A. I do not remember the figures of the Crow's Nest Pass coal precisely, I would have to look that up; I believe 10 or 15 per cent; it varies.

Q. Do you remember the Drumheller coal, for instance? Can you give us any figures on the western coal?—A. The Drumheller coal is a different proposition. The Drumheller coal is a premium coal because of its domestic burning qualities and it is not a question of cleaning. It does not require washing; it has a fairly low ash content. Take it as you get it is the best policy, I believe.

The CHAIRMAN: Gentlemen, there are some members of the house who do not belong to the committee but they are so very much interested in the uses of coal that they are attending here and asking questions. I am assuming there is no objection to their asking questions.

Mr. JOHNSTON: May I just mention in that respect that Mr. Quelch was not able to be here this morning and he asked me to attend in his place?

The CHAIRMAN: I wanted to bring that out.

*By Mr. Martin:*

Q. I wonder if Mr. Gilmore can tell us something about the extent to which the automatic stoker has opened up the railroad fuel markets for small coal.—A. May I ask for what purpose, domestic or steam?

Q. Both purposes. My question is only as to the railroads, but make it both, and show the extended use that may be made of coal as a result of the saving processes of the stoker.—A. The stoker is widely used for steam-raising purposes. The small stoker for domestic purposes for the private houses has not gained extensive use in this part of the country yet.

Q. What do you mean in this part? I think the stoker is certainly being used more. I would think that its use was definitely on the increase, I do not know about Ottawa here, but I know in my section it is.—A. I am thinking of the small stokers for private houses.

Q. Yes.—A. I agree there is great room for development, but I think the stoker people will tell you of the use of the smaller domestic stokers for that purpose. That is a question of development and research in the future.

The CHAIRMAN: Where are those stokers manufactured?

Mr. MARTIN: Windsor is one place.

The WITNESS: Montreal.

The CHAIRMAN: Canadian manufacture?

The WITNESS: Oh, yes.

*By Mr. Johnston:*

Q. Would the greater use of these stokers make a greater market available for the western coal?—A. I believe it would make a greater market for both western and eastern coal, yes.

Q. It would be to the advantage of Canada definitely to have a stoker system introduced?—A. Decidedly.

Q. It would be a matter of cost in the converting from one type of stoker to the other?—A. There is the other factor, the converting of people to the use of them.

Q. That would be educational?—A. Yes.

Q. The maximum result from the coal would be approximately the same?—A. I believe so, yes.

*By Mr. Martin:*

Q. They can use different kinds of coal, use the poorer types of coal.—A. If you put in a stoker you would use the ordinary soft coal for heating a house, where now you have anthracite, coke, luxury fuels.

*By Mr. Johnston:*

Q. What success have you had with briquetting of the softer coals?—A. Briquetting is not considered necessary for ordinary soft coal; you can use it in the smaller sizes by the use of stokers.

*By Mr. Martin:*

Q. You are not restricted to lump size coal at all?—A. No. Briquetting is considered for such as anthracite fines, coke breeze, anthracite fines in the Canmore district, or the carbonized residue of Saskatchewan lignite.

Mr. MACNICOL: As a matter of fact, that is all they use for making briquets. All they use is the ordinary dust, refuse or what is left over after the real coal has been shipped.

The WITNESS: That is the real purpose.

Mr. MACNICOL: In former years they could do nothing with it, now they briquet it; they import the oil to shoot into the briquets as they make them.

The WITNESS: Yes.

*By Mr. Johnston:*

Q. Is the manufacture of briquet so expensive that it would materially affect the price of coal?—A. All they are using is the cheap refuse product, the dust.

Q. I had in mind taking the ordinary soft coal of western or eastern Canada and crushing it and then briquetting it to make it more suitable for shipment.—A. I do not think that would be commercially economical because you are taking a coal in the lump form, which has a higher value than the other form.

Q. Except it would stand the shipment better. As it is now because of evaporation it breaks up. That has been one of the objections in eastern Canada to western coal. They say it will not stand the weather sufficiently.—A. There is another factor if you are thinking of the Alberta domestic coal—

Q. That is what I have in mind.—A. We have yet to prove we can make a satisfactory briquet out of that coal without previous carbonization, the same as they do with Saskatchewan coal.

Mr. MACNICOL: The objection to western or Drumheller coal is not so much the shipping of it as it is the deterioration of it after it arrives at its destination. If the city of Toronto or the government for the city of Toronto would put up large coal sheds in Toronto in which they could store a million tons of Drumheller coal under cover, that coal would be all right for burning in private homes. The trouble is now after you get it down here and it has to be stored in the weather it deteriorates. I used Drumheller coal and I found it very satisfactory, but I had it under cover after it arrived in Toronto.

The WITNESS: I think the better way to use the fines from a deteriorated coal and Alberta domestic coal would be to mix it with steam coal rather than to briquet it. Once you briquet it you may have to give it a preliminary carbonizing treatment and it may not stand the cost of processing.

Mr. MACNICOL: For briquetting you would need to use something like the Estevan coal.

The WITNESS: After carbonization.

Mr. JOHNSTON: As regards the Estevan coal, do they ever ship it east?

Mr. MACNICOL: I think Winnipeg takes all they can produce. Their briquets are very fine. If we could get Estevan briquets in Canada we could do away with importing cannel coal from the United States. The Estevan briquet in a fire grate makes a good fire.

The WITNESS: It was coming as far east as Port Arthur before the war—Winnipeg and Port Arthur, was it not?

Mr. MACNICOL: I am satisfied that if the people of this country could get together and initiate a policy to use the Estevan briquet in place of cannel coal we would be wise to take measures to prevent the importation of cannel coal from the south and in place to use Estevan briquets, because they do give splendid satisfaction in the ordinary fire grates.

Mr. JOHNSTON: Do you think that if we recondition this coal or briquet it that would eliminate the importation of coal from the United States and put that coal from Estevan or Alberta or Nova Scotia into the eastern markets and compete with the United States coal.

Mr. MACNICOL: So that I may not be misunderstood, I suggested briquets in eastern Ontario to eliminate the importation of cannel coal, which is not a

large volume but costs this country a lot of money. The Estevan briquets would take the place of the cannel coal—the big chunks. That is one way in which we could use Estevan briquets with great satisfaction.

*By Mr. Martin:*

Q. I wonder whether the witness could say to what extent the need for anthracite coal for domestic purposes would be eliminated if we were to go into a greater or a fuller use of the stoker process?—A. It would be a slow development, to educate the people to the use of it. I believe right here in Ottawa you will find here and there householders that have stokers and are using them satisfactorily with soft coal. If one is going to spend money to put in a stoker to use soft coal the ordinary householder figures out that it is going to take him three or five or ten years to pay for that stoker and they would ask: why do I have to go to that expense now? I will carry on the way I am and use anthracite or coke which are the best household fuels.

Mr. MACNICOL: A stoker gives first-class satisfaction in houses of substantial size, I would say from twelve rooms up as a minimum size to fifteen rooms or twenty rooms, and larger buildings, but in the ordinary small house of five or six rooms the householder is going to use a hot air furnace.

Mr. MARTIN: In the type that Mr. MacNicol speaks of the saving is considerable, and it would pay in three years.

Mr. MACNICOL: It gives first-class satisfaction in large buildings.

The CHAIRMAN: As soon as we are through with our present discussion on stokers I suggest that we hear Dr. Cambron who has a brief to present to us.

Mr. McNIVEN: I would like to say that in my experience the use of stokers in the smaller sized homes—homes of six or seven rooms, has proven satisfactory. I have one in my own home and we would not be without it. You are able to use a lower grade of fuel in the stoker than in a hot air furnace.

The CHAIRMAN: Are there any further questions with regard to the use of stokers and the elimination of imported coals through their use? If not I shall ask Dr. Cambron to take the stand.

Mr. MACNICOL: Dr. Cambron is going to deal with the by-products of coal, and I have three questions to ask him before he starts: 1. outline the by-products the Research department has proven can be extracted from coal; 2. what breed of coal did the Research department use for their tests, and from what mines were the samples taken; 3. what is the location of plants, if any, now operating in Canada to produce chemicals and by-products from coal, and are the plants located in reasonable proximity to coal mining or in a market where it is shipped from?

Dr. A. CAMBRON, Chemist, Division of Chemistry, National Research Council, called.

The WITNESS: I desire or prefer to answer the questions in a short memorandum, and if your questions are not fully answered you might point out in what respect my answers are lacking. I made a short survey of the chemical uses of coal in other countries.

Mr. ROSS (Calgary): Are you head of the research council?

The WITNESS: I am on the staff. Dr. Steacie is the director of the division.

Mr. JEAN: How long have you been on the staff?

The WITNESS: Ten years.

Dr. STEACIE: Dr. Cambron has been the main person connected with petroleum and industrial organic chemistry in the National Research Council and since petroleum and coal are related in the chemical field Dr. Cambron is really in much the closest touch with this general field. In addition to that his experi-

ence has been along organic chemistry lines and he is familiar with the main industrial processes in Canada.

Mr. ROSS (*Calgary*): Before going to the department what was his experience?

Dr. STEACIE: He is in charge of the department on industrial organic chemistry.

The CHAIRMAN: You will remember the questions that were asked when Dr. Gray was here concerning the burning of coal for gassing and so forth and using it for that purpose instead of coal. Part of that question has been sent to Dr. Steacie and Dr. Cambron.

The WITNESS: Would it be satisfactory to take up that question first—the production of liquid fuel from coal. I think that will answer your question. No part of Canada is operating this particular process.

Mr. MACNICOL: My first question was what by-products has the Research department proven can be extracted from coal.

The WITNESS: I think that question is answered later.

Mr. GILLIS: Would it not be better to let Dr. Cambron go ahead with his brief, and we can question him afterwards.

(*See Appendix A to this day's evidence.*)

The CHAIRMAN: I think that would be satisfactory to Mr. MacNicol.

The WITNESS: The only location of a large-scale plant for the production of fuel is at the moment in Germany. Fairly reliable estimates are available of the production of synthetic petroleum in Germany in 1939 of 1,800,000 tons.

Mr. MACNICOL: Was that amount produced or used?

The WITNESS: Produced. That is the actual production.

The CHAIRMAN: That is in Germany?

The WITNESS: Yes.

Mr. MACNICOL: From the by-products?

The WITNESS: No, this is obtained directly from coal. Some of it is obtained from coal by-products, but all of it can be regarded as being derived from coal. At that time there were plants projected or under construction to raise the production to 4,000,000 tons a year.

Mr. BLACK: Four million tons of what?

The WITNESS: Liquid hydrocarbon fuels, synthetic petroleum: but due to several causes—probably aerial bombing and other things—that figure has been estimated now to be 3,000,000 tons a year. Of course, that is a very uncertain estimate, because the source of that figure may be questioned. This production of synthetic petroleum from coal, I think, becomes now more and more important in view of the recent estimates of the available petroleum reserves. Some fairly reliable estimates place that at fifteen years—I mean, in fifteen years it is estimated the rate of consumption and the rate of production will coincide, and beyond that point decreasing reserves will cause the price of petroleum products to rise; and if the present demand for that source of energy keeps increasing at the present rate alternative sources of motor fuel will have to be found, and coal is one of the alternative sources that has been considered. I might say that coal reserves as compared with petroleum reserves have been estimated to be anywhere from 2,000 years—some estimates go as high as 5,000 years. There is another point that comes up in connection with the use of coal for the production of synthetic motor fuel. The process developed in Germany—and that process has been investigated here in the Mines branch—is not a very efficient process, for only about 40 per cent of the energy of the coal is recovered in the synthetic petroleum—or gasoline. On the other hand, improvement in the

production of power from coal has resulted, and it is now possible to produce electric power with a consumption of .8 pounds of coal per kilowatt hour. This gives roughly 30 per cent efficiency, and this means that the over-all efficiency, using coal, is higher than is possible by the hydrogenation of the coal to liquid fuel and using it in an internal combustion engine which has a low thermal efficiency.

Now, I have also listed a number of industrial processes utilizing coke oven by-products. I think this will answer Mr. MacNicol's first question.

Mr. MACNICOL: What are they?

The WITNESS: One of these processes is in use in Canada now, the production of phthalic anhydride.

Mr. MACNICOL: Creosote and all that sort of thing?

The WITNESS: I have limited this survey to chemical products on which may be based large chemical industries. I have limited this to new developments.

Mr. MACNICOL: I was interested in what can be developed and what is developed.

The WITNESS: I would like to point out that both in France and Belgium they have produced ethyl alcohol from ethylene recovered by liquid fractionation of coke oven gas. This has been done commercially on a large scale. It requires a lot of cheap coal.

Mr. MACNICOL: We have an abundance in Canada of both.

The WITNESS: Butadiene is another possibility. Koppers Corporation have worked out a process for producing butadiene starting from coke oven benzol.

Cumene: That is now being used as a blending agent in aviation gasoline and is now being produced in Montreal and in several refineries in the States, and it has proved to be a very welcome relief from the aviation gasoline situation both here and in the United States.

Phenol: A considerable amount of phenol is obtained directly from the tar, but this represents only about a quarter of the phenol now being used in the plastics industry, the remainder being produced from coke oven benzol. In 1940, 93,000,000 pounds of phenol were produced in the United States.

Phthalic Anhydride: That is produced in Canada from a coke oven by-product. The rapidly growing plastics industry will demand more and more phenol and phthalic anhydride. I have a figure for the consumption of phthalic anhydride for 1941; it is 58,000,000 tons.

Styrene: 200,000 tons of this chemical will be required annually when the full United States rubber program gets under way. This is also derived from coke oven benzol.

Now the last chemical utilizing product is nylon, which has saved the situation brought about by the shortage of silk.

Apart from these chemicals that may be obtained and manufactured from coke oven by-products there are two very important products which may be derived from coal itself: synthetic methanol and ammonia.

Mr. MARTIN: Ammonia sulphate?

The WITNESS: No, synthetic ammonia, which can be produced in large quantities. The amount recoverable directly as sulphate is very limited. The only limit to the amount of ammonia that can be produced is the amount of coke. That is quite apart from the production of ammonia sulphate as a by-product. This is utilizing coke itself as a source of hydrogen.

*By Mr. Gillis:*

Q. Is that being used to any extent in Canada?—A. Not to a large extent.

Q. Synthetic coke has replaced it, has it not?—A. I should point out in

this connection that there is a third product which may be mentioned: sulphur. The Consolidated Mining and Smelting are now using coke for producing sulphur.

*By Mr. Martin:*

Q. What is that?—A. They are producing sulphur, they are using coke to reduce sulphur dioxide. The production of synthetic methanol from coke is largely responsible for the rapid development of the plastics industry. To produce methanol, coke is reacted with steam to give carbon monoxide and hydrogen, which are then combined over a catalyst under pressure to form methanol.

A large fraction of the hydrogen required for the synthesis of ammonia, for fertilizer and explosive manufacture and in other industries, is also obtained by the action of steam on coke. The consumption of coal in the production of the above two chemicals is now estimated to be several million tons annually.

*By Mr. Johnston:*

Q. Is it more economic to produce ammonia from by-products of coal or natural gas?—A. That would depend on the local conditions.

Q. In the process of getting it from coal, there would be quite a manufacturing process to convert the coal to gas before you attempted to get ammonia from it?—A. No, the process is the production of water gas giving a mixture of carbon monoxide and hydrogen which are used in the making of methanol. The process can be used with cheap coal for making ammonia.

Q. Is there much manufacture of ammonia from coal in eastern Canada?—A. No, not by this process. There is none just now.

Q. None to speak of?—A. No. The hydrogen at Trail is produced by the electrolytic process.

Q. How does that compare with the amount being produced in Calgary from natural gas?—A. I have no figures on the production in Turner Valley. If you take the long view, I think you would leave the Turner Valley out. You might base an industry on it for the next twenty years, but what will happen after that is doubtful.

*By Mr. MacNicol:*

Q. It is estimated that Turney Valley will be able to produce about 100,000,000 barrels of oil. That would not be enough oil to establish a long-term plant?—A. I should not think so.

*By Mr. Johnston:*

Q. The greatest need right now is for war purposes; and after the war it might not be commercially profitable.—This is dependent on conditions after the war.

*By Mr. Martin:*

Q. Is it not a fact that if all the ammonia and methanol in Canada were made from coal, it would really require a little tonnage of coal to produce those two elements.—A. Did you say "a little"?

Q. Yes. There is a lot of ammonia used.—A. Yes. But it would use a lot of labour. It would use more labour than putting the coal to other uses, if that is the problem.

Q. Have you finished your brief?—A. Yes.

*By Mr. Jean:*

Q. Have you any figures as to the number of tons of coal which are now being used in by-products?—A. That takes in steel manufacture. I have no figures, but I can get that. It runs to millions of tons.

Q. Millions of tons are actually being used?—A. Yes. That takes in iron production. I have not touched on that.

*By Mr. Martin:*

Q. What about higher alcohols?—A. It is claimed that under certain conditions you can get higher alcohol by the Fischer-Tropsch process. This is one of the two German processes for the liquefaction of coal.

Q. Have they had a similar experience in the United States?—A. They are working on it but it is not being used. Germany is the only place where it is being used now. It is being studied in England by the Fuel Research Board. They have worked on that for the last fifteen years.

*By Mr. Johnston:*

Q. Have you the figures in regard to the cost of producing this synthetic fuel in Germany?—A. No.

Q. The cost per gallon, we will say?—A. No. There is a statement here by the late Mr. Farish that gasoline can be produced by hydrogenation at 12 cents a gallon as against 5 cents from petroleum.

Q. You say 5 cents for the production of gas from petroleum?—A. Yes.

Q. Where did you get that figure?—A. That is Mr. Farish's figure.

Q. That is his figure?—A. Yes.

Q. I was wondering where he got that cost of 5 cents per gallon from petroleum.

*By Mr. MacNicol:*

Q. Synthetic, you say, is 40 cents?—A. 12 cents. That was in 1934.

*By the Chairman:*

Q. Are these German costs you are talking about?—A. No. They were American costs. This is the United States gallon.

*By Mr. MacNicol:*

Q. When we pay 5 cents a gallon for gasoline, we are paying enough.—A. The cost of synthetic fuel in England, as far as I remember, is estimated around 12 cents. It has been operating, but only under government subsidy.

*By Mr. Johnston:*

Q. I understand, Mr. Chairman—and I am open to correction on this—that when the investigation was on in Alberta in regard to the manufacture of gasoline from oil by-products or petroleum products, it was around 12 cents a gallon then. That is why I questioned the price of 5 cents.

Mr. JEAN: When was that?

Mr. JOHNSTON: When the McGillivray inquiry was on.

The WITNESS: Do you think 5 cents is too high or too low?

*By Mr. Johnston:*

Q. I am not questioning that. I was just pointing out that the figures, which were produced by the Imperial Oil Company in that inquiry, were around 11 or 12 cents a gallon.—A. In Turner Valley?

Q. Yes, producing it from the Turner Valley field. I think that is extremely high.—A. It certainly was.

Q. I think possibly your quotation of 5 cents would be nearer, and maybe that is high.—A. 5 cents is high.

Q. Yes, I would think so.—A. There are refineries producing gasoline at less than 5 cents. That is 5 cents per imperial gallon.

*By Mr. MacNicol:*

Q. I want to see if I have the doctor's statement correctly, that before the war in Germany, which was the only place you knew of at that time where they were using coal for the production of by-products, particularly gasoline, I think you said they produced 1,800,000 tons.—A. Yes.

Q. But your opinion is that perhaps later on, if the plans they had projected had come into operation, the production would have been raised to 4,000,000 tons of by-products?—A. Yes. 4,000,000 tons of synthetic petroleum.

Q. I think you added that approximately 40 per cent or maybe 50 per cent of the by-products would be gasoline.—A. No.

Q. 40 per cent for gasoline?—A. No. I pointed out that 40 per cent of the energy in the coal is recoverable in gasoline.

Q. That is what I mean. For quick figuring I was just assuming that 50 per cent became gasoline. On that basis it would mean 2,000,000 tons of gasoline out of 4,000,000 tons of by-products.—A. No. I said the energy; because actually it takes 4 tons of coal to produce 1 ton of gasoline.

*By Mr. Martin:*

Q. By hydrogenation?—A. Yes.

*By Mr. MacNicol:*

Q. What is the difference between that and what I am saying. I said gasoline.—A. Yes.

Q. What I am trying to figure out is this. I read a few days ago that the entire German production of gasoline to-day from the synthetic process is 18,000,000 barrels a year. Their war machine is using 300,000,000 to 400,000,000 barrels a year.—A. I know. It is not filling their entire requirements.

Q. No, and nothing like it, if they are only producing 18,000,000 barrels. From 4,000,000 tons of these by-products they were producing roughly 11,500,000 barrels.—A. That is about right. Seven barrels to the ton.

The CHAIRMAN: Four to one, is it?

Mr. MACNICOL: The question is clear: either they have increased their production of gasoline from by-products by a tremendous amount or their reserves are running out. It is the one or the other.

*By Mr. Martin:*

Q. You mentioned some derivatives—phenol, oil and gas. What about tar?—A. I have only touched on the new developments.

*By Mr. MacNicol:*

Q. He said he only touched the new things. Tar is an old one.—A. There has been a considerable amount of work on tar.

*By Mr. Martin:*

Q. Are there any new uses for tar itself?—A. There are no startling new developments for the use of tar. I thought I would cover the possible new developments.

*By the Chairman:*

Q. Dr. Cambron, if there was a large development of the chemical industry in Canada, would our coals be of extreme use?—A. I believe there are a variety of coals—am I right, Mr. Gilmore?

The CHAIRMAN: Could you answer that? If we developed a chemical industry in Canada, would our coal beds be of use to use; real use, I mean?

Mr. GILMORE: I think they would be absolutely fundamental.

The CHAIRMAN: You think they would be fundamental?

Mr. GILMORE: Yes.

Mr. MACNICOL: I want to ask one further question based on what has been said. If new industries are to come, it is imperative that some of them be established in the western provinces. Therefore I asked the question earlier if we are to embark upon the production of by-products from coal, would the plants, from an economic point of view, have to be erected near the coal mines or in close proximity to the markets, which would mean transporting the coal to the plants.

The WITNESS: That would depend upon the value of the products.

*By Mr. Ross:*

Q. Would you illustrate that?—A. If you are producing a product of high value and small bulk, you would locate the plant near the coal. But if you are producing a product of low value and large bulk, it would not matter where you put the plant, because it would not cost any more to transport the coal to the plant than to transport the product to the market.

Q. Could you give us an illustration of what you have in mind now?—A. If your product were benzol, for instance, I think you would have more leeway as to the location of the plant than if you were producing a valuable chemical like phthalic anhydride—it sells at over 50 cents a pound—where the freight would be a very small fraction of the value of the product.

*By Mr. MacNicol:*

Q. So that some plants could be economically erected beside, near or in proximity to the coal mines?—A. Yes, preferably; because undoubtedly the chemical products made would have a higher value than the coal, and it would be cheaper to transport the products to the market than to ship the coal to the plant.

Q. Then the plants would be erected near where the market is—A. No, near where the coal is.

Q. The plants would be erected near where the coal is?—A. Yes, I think so.

*By Mr. Martin:*

Q. I do not know whether this is for you or some of your colleagues. What about agriculture as an outlet for coal?—A. There is ammonia as a fertilizer.

Q. All the insecticides and fungicides?—A. There is methanol and formaldehyde.

Q. And fertilizer?—A. Yes. Methanol and ammonia will be required in increasing amounts, and Canada should be independent.

*By Mr. McKinnon:*

Q. What kind of coal did you say was used in Germany as a base for their chemical and dye industry?—A. The production of synthetic petroleum is mostly based on brown coal.

Q. On brown lignite coal?—A. Yes.

Q. Do you know what comparison there is between brown lignite coal and ours?—A. That I could not say. Probably Mr. Gilmore could give that.

Mr. GILMORE: Our small scale laboratory experiments were based on a comparison with Yorkshire coal, giving 160 gallons of oil per ton. This is crude oil.

Mr. MACNICOL: That is for Yorkshire coal?

Mr. GILMORE: Yes. We used that as a standard. From Sydney coal we obtained 155 gallons and from the Crow's Nest Pass coal we can get practically that same yield. Then as you get down into the sub-bituminous coal or the domestic coals of Alberta, it drops to about a third of that. That is the lower rank coal.

The CHAIRMAN: Yorkshire was 160?

Mr. GILMORE: Yes.

Mr. MacNICOL: Yorkshire coal is real high-grade bituminous coal?

Mr. GILMORE: Yes. That is what they are using at the Billingham plant or what they were using at the Billingham plant, I believe. The high yields came from the medium or high-grade coals but as you get into the lower-grade domestic coals the yield drops away down to 50 and 25 gallons.

Mr. JOHNSTON: The cost was stated to be about 12 cents a gallon in the States to produce gasoline from coal. What would be the cost of producing that in Canada?

Mr. GILMORE: I would not want to venture an opinion along that line. There is not enough work done.

Mr. MARTIN: I wonder if Dr. Cambron might tell us something about the synthesis of oil from coal and its excess products as a lubricant to machinery.

Dr. CAMBRON: Synthetic lubricating oils are being produced that way.

Mr. JOHNSTON: In regard to my question, I was trying to get at this point. We are now very, very short of gasoline; in fact, we are now so short of it that commercial cars and pleasure cars are being put off the road entirely because of the shortage of gasoline. We have an unlimited supply of coal, taking it from one side of Canada to the other. Suppose we can produce gasoline at 12 cents a gallon,—or give them a little leeway and say we will produce it at 15 cents a gallon.—That would include the entire cost of producing gasoline. Then we could put it on the market and give them another 5 cents profit, say, 20 cents a gallon. If that is possible, why are we not doing that?

Dr. STEACIE: Does that not come down to this situation, that there is no shortage of gasoline. The shortage is a steel shortage.

Mr. JOHNSTON: Not entirely.

Dr. STEACIE: There is at the moment ample petroleum, but you have to use steel for your plants. You have to use steel for pipe lines or any other method of transportation. You would have to use steel to produce plants to make the gasoline from coal. You would then have to use steel and more steel than in the case of petroleum. Then you would have to use steel to ship it either by pipe line, tanker or tank car. So that really it is not a gasoline shortage at the moment. It is a transportation shortage.

Mr. JOHNSTON: I do not agree with you entirely. Why is it that, out in the western provinces, right where the gasoline distilleries are, they are rationing gasoline? You can go right out to Turner Valley and the gasoline is rationed right at the very well, where there is practically no cost for transit. You take it practically out of the ground and put it into your can.

Dr. CAMBRON: If they did not ration it in Turner Valley and did ration it elsewhere, some one would kick.

Mr. JOHNSTON: It is not a case of transportation.

Dr. CAMBRON: Yes. It is a case of transportation elsewhere, where it is also needed. It is not needed only in the valley.

Mr. JOHNSTON: You are trying to tell me that it should be rationed at the well although there is a surplus?

Dr. CAMBRON: Yes.

Mr. JOHNSTON: Just because there happens to be a shortage on the Atlantic seaboard?

Dr. CAMBRON: I think that is reasonable.

The CHAIRMAN: Mr. Johnston, I do not want to interrupt, but we are now getting into the question of rationing for purposes of the war and the justification for rationing in certain quarters. Would you restrict your questions to the possibilities of this when we are away from rationing and under post-war conditions. This after all is a committee on reconstruction.

Mr. GILLIS: Speaking along the lines you just mentioned, may I say that my conception of bringing these men before this committee this morning was to go into the possibilities of extracting by-products from coal, and utilizing them in the future with the end in view of creating employment when the war is over.

I listened with a great deal of interest to Dr. James and Dr. Wallace and those who came before the committee on the matter of conservation. I think that the basis of our discussion this morning should be the conservation of some particular resources that are not unlimited. In the past all that we have been doing is extracting the coal from the ground and burning it up, throwing away three-quarters of the value of that particular commodity without any attempt being made to utilize it. I think what we should get down to at this particular session and at another one if necessary is an examination of the possibility in the aftermath of the war of establishing necessary plants in the coal-producing areas of Canada to extract and fully utilize all of the by-products of coal. If we do not do that we are doing a great disservice to future generations. There are four times the value in the by-products than there are in the original coal itself. I think Dr. Cambron enumerated this morning a few of the things that could be taken from coal. In so far as the dye industry and the drug industry are concerned there are unlimited possibilities. People who have done research work in this connection say that there are 200,000 articles that can be manufactured from the by-products of coal. I have a list of them here, and I prepared questions. This morning I thought we were coming in here to question these gentlemen specifically on certain points with respect to the creation of industries when the war is over, to fully utilize the resources that we have. All that we have been doing so far is carrying on a general conversation.

I have a list here of specific questions on particular industries and I should like to pass them on to Dr. Cambron or some other member to answer. I shall not waste the time of the committee by reading them, but I should like them to look them over and answer them one by one. One particular question I should like to stress is: What are the possibilities of creating in the coal-producing areas of Canada the necessary plants to extract fully the by-products from coal so that we may be able to utilize them for the employment of our men when the war is over? I think that is the basic problem that this committee has to examine.

The CHAIRMAN: Have you a copy of the questions for the other gentlemen?

Mr. GILLIS: No, I have just the one.

Mr. MACNICOL: May I ask Mr. Gillis, Mr. Chairman, because we have gone over a lot of what Mr. Gillis has said, if he heard the answer Mr. Gilmore gave that the Yorkshire coal is so much more effective in producing those by-products than any coal we have here?

Mr. BLACK: Not very much, 116 to 155.

Mr. GILLIS: That has particular reference to gasoline.

Mr. GILMORE: These figures were for the primary crude oil from which you get about 45 per cent gasoline.

Mr. MCKINNON: Is there any firm or company in Canada along the lines of the German Dye and Chemical Works set up for the purpose of manufacturing things from the by-products of coal for Canadian markets?

The WITNESS: Generally speaking, no, but I think the facilities are available. There are two companies now, the Dominion Tar and Chemical Company and the Barrett Company, who, I believe, do buy all the coal tar from the by-product ovens and manufacture certain basic tar chemicals. I do not know to what extent they are worked up by these companies or transferred to smaller companies for working up.

*By Mr. McKinnon:*

Q. Do you believe that the limited markets available in Canada would make it possible for a company, a smaller company along similar lines, to become established, a remote possibility?—A. I think likely there will be a continuation of our past policy, to rely on American companies for that, and may be subsidiaries of American companies in Canada.

*By Mr. Martin:*

Q. We have two of these now?—A. Yes, the Barrett Company is American.

*By Mr. McKinnon:*

Q. It would be possible to compete under normal conditions in peace time with the German Dye Works?—A. I do not know that.

Mr. MARTIN: It seems to me Mr. Gillis' question is an extremely important one; while in one sense it has been answered, it would be interesting if we could have the dollar value of bituminous coal production and the dollar value of the elemental products from bituminous coal, and the third figure, the dollar value of the elements produced from those derivatives themselves; because I understand in addition to the elemental products that come from the coal there is in addition a great deal of processing carried on, which in turn creates a second set of elemental products and it goes on, I suppose, *ad infinitum*. Have we got that worked out at all? I know in the report of the Hoover committee made in 1930 on the bituminous coal industry in the United States my recollection is these figures were broken down into classifications such as that and gives an idea of the tremendous possibilities. Hitherto all the raw materials that were used in those products have been coming from vegetable products. Now coal supplies a great number. If we could have them broken down it would give us some picture of the tremendous possibilities.

The WITNESS: After all, when you are figuring on the refining of coal tar you are only dealing with 10 to 15 per cent of the coal; that is the tar yield. The by-product coking industry do want to make the tar and get rid of it; they sell it to a tar industry. Now, just how far the coal tar industry goes I cannot give you the details, but they do not go very far compared with the United States and Germany as a general statement.

The CHAIRMAN: I wonder if I could ask a question relating to the use of coal for gasoline. I sent a memo. to Dr. Steacie and Dr. Cambron the other day. I have been making some personal inquiries, not connected with this committee, towards the use of fuel for immediate war purposes and for after the war of coal up in the Peace river country at Hudson Hope, and the man who has been making some inquiries for me told me he was informed there was already in operation in the United States a process for the making of gasoline, oil and some of the things that are required in the operation of aeroplanes in the United States from coal. He wondered if that could not be applied immediately to the coal in the north country along the Alaska highway and the route of the military air system of Alaska and Asia for the purpose of creating from the coal products in that area all the gasoline required for the highway and air services and to have a plant there following the war in the days of reconstruction. Can you give me any answer on that?

Dr. CAMBRON: I looked that up, but I could not give you much of a survey since there was not much information about the source of the cor-

respondent's information. He might have been referring to the use of some by-product from coal.

The CHAIRMAN: He had it as a \$200,000 plant, and he said it would produce—I won't quote him, because I may be off on the figures—he said that a \$200,000 plant would take care of a great deal of the gasoline requirements in that north country.

Dr. CAMBRON: I am afraid there is a misunderstanding there.

Mr. MARTIN: I wonder if I could put another question following Mr. Gillis' question.

Mr. MacKENZIE (Neepawa): Has Mr. Gillis' question been answered?

Dr. STEACIE: Could I say something which I think would have a bearing on Mr. Gillis' questions in general before coming to them specifically; that is, that some of the difficulties and misunderstandings that arose out of the question of coal utilization are due to the fact that once you attempt to use coal as a chemical for its carbon content it is true you could get the number of compounds that Mr. Gillis refers to, 200,000. I could enlarge on Mr. Gillis' estimate of 200,000 to 500,000 components from it, but you could also make them from any other substance that contained carbon, such as wood, wheat, anything else. It becomes merely an economic question. You can synthesize any organic chemical from any other one and it is entirely a question of choosing the most convenient one. In the German case, if you start to produce a certain substance you look around for the cheapest raw material that will get you what you need. In Germany, having no petroleum, the obvious thought was coal. In the industry there the products which we call by-products were the convenient ones to start with. One cannot merely estimate the value of those by-products and then estimate that if you treated enormous quantities of coal the value of the by-products would be the same. The point is it is an economic question as to how much market there is for the manufactured substances. Then you start looking for the cheapest place to get your raw material. It is not quite true to say that these are by-products. To some extent they may be by-products, but to another extent you are not using them as by-products, you are using coal as the starting material. From that point of view it comes down to this, that you can make almost everything of an organic nature from coal if you want to. You can also make it from other things, and it is a question in each individual case as to which is the cheapest thing to do. In recent years there has been a very strong trend in the United States, for example, to use petroleum as the starting point for the chemical industry, mainly because they have the oil. But that industry will have to switch ultimately when the resources of petroleum begin to run out. It would be quite possible to base the whole German industry of chemicals and drugs on coal or on petroleum or on wood, depending on which you have got, but the price would vary enormously.

The CHAIRMAN: That is an important point, there is no question about that.

Mr. MARTIN: I think he has brought out the crux of this whole problem.

Dr. CAMBRON: May I try to answer a few of Mr. Gillis' questions? The first question is this:

Many of the best dyes are made from coal tars. Before the last war Germany had practically a monopoly of this dye industry. After the war the United States built up a large dye industry. The second and third questions are: Has any comparable dye industry been built up in Canada? What are the possibilities in this respect?

I may say we are no longer dependent on Germany as a source of dyes. The United States have built a large dye industry based on coal tars and other sources. There is no industry in Canada.

Mr. GILLIS: What are the possibilities in that field?

Dr. CAMBRON: It would take several years to build up an industry, a much longer period than would be required for basing an industry on the production of things like ammonia and methanol. The question of markets would come into the picture since the United States can supply existing markets.

Mr. ROSS (*Calgary*): Is that the principal cause?

Dr. CAMBRON: Probably not the principal cause, but it is important.

Mr. ROSS (*Calgary*): Can you give us anything outside the markets that would interfere with the building up of an industry in Canada?

Dr. CAMBRON: Years of experience probably will be required before any contribution could be made.

Mr. GILLIS: It has possibilities.

Dr. CAMBRON: Oh, yes, definitely.

Mr. ROSS (*Calgary*): What kind of coal would it use?

Dr. CAMBRON: That would be based on by-products.

Mr. ROSS (*Calgary*): By-products of any particular kind of coal?

Dr. CAMBRON: No. Now, Mr. Gillis, your second question is this:

A whole series of drugs, such as aspirin, are largely derivatives from coal. Are aspirin and other drugs manufactured in Canada? Could they be?

I think the answer to the first question applies to the second. I have not touched on these special products which could only be produced in small quantities and are not as important as the other products, so far as domestic economy is concerned. The third question is:

The synthetic method has somewhat replaced the manufacture of ammonia from coal. Is ammonia manufactured in Canada? Would it be possible to make use of coal in this industry?

I gather you are referring to the production of ammonia as a by-product, not to the production of ammonia from coke. Synthetic ammonia is manufactured in Canada and, of course, it would be possible to use a larger amount of coal for producing this chemical.

The fourth and fifth questions I shall leave to Mr. Gilmore. I think I mentioned nylon. Nylon is not produced in Canada.

Mr. GILLIS: There is a possibility there?

Dr. CAMBRON: There is a possibility there.

Mrs. NIELSEN: Was it never produced in Canada?

Dr. CAMBRON: It is being processed in Canada, but produced in the States.

Mr. ROSS (*Calgary*): Produced commercially profitably?

Dr. CAMBRON: The question of markets comes up again.

Mr. TUSTIN: Nylon is produced in Canada now.

Dr. CAMBRON: Manufactured in Canada. It is processed in Canada. So far as I know, I do not think it is being produced in Canada.

Mr. TUSTIN: Is not the new plant in Kingston producing nylon?

Dr. CAMBRON: They are not starting from coal.

Mr. McNICOL: Do you know offhand whether the mills are protected by a tariff or would be if there were smaller mills attempted in Canada?

Dr. CAMBRON: Since most of the nylon is for military purposes, I do not think the tariff question is important. Since it is not produced in Canada it probably would be tariff free.

Mr. JOHNSTON: That too largely depends on markets?

Dr. CAMBRON: Yes.

Mr. JOHNSTON: Almost all these manufactured products that you have mentioned depend upon markets?

Dr. CAMBRON: Well, on the local markets first, based on producing it cheaper than it is being produced elsewhere.

Mr. JEAN: Do you think those by-products, those chemical by-products could be used here in competition with markets in the United States?

Dr. CAMBRON: Well, it should be possible to produce nylon. I would not call it a by-product in this case, although its manufacture is based on a by-product of coal. It should be possible to produce nylon here as cheaply as it is being produced in the States.

The CHAIRMAN: You say it should be possible?

Dr. CAMBRON: There is one consideration and that is that the local markets being quite small this should be taken into account.

The CHAIRMAN: Because of population?

Dr. CAMBRON: Yes.

Dr. CAMBRON: Your last question refers to the production of carbide. You say:

Coal is used to make carbide. A large amount of power is also essential. Some of the products are synthetic plastics, resins, acetic acid and varnishes. Would it be possible to establish units of the heavy chemical industry in the coal-producing regions of Canada?

There you speak of a large number of products derived from carbide. I have not touched on that since it is already an existing industry, and then, of course, there is always the possibility of extending the industry, but it is already established.

Mr. GILLIS: What I had in mind was the expansion.

Dr. CAMBRON: Well, then, again markets come in, if there are enough markets to absorb the production, markets and available power. Does that answer your question?

Mr. GILLIS: Yes, it does.

The CHAIRMAN: Mr. Martin, you were asking a question when I interfered.

Mr. MARTIN: The bituminous coal production right now, Mr. Chairman, is, of course, abnormally high. I suppose the highest period of production before was 1929. Having in mind the object of this committee to provide post-war work I am wondering if there is any one of these four gentlemen who could tell us, having in mind and taking into account the recovery of such markets and having in mind new uses and economizing on fuel that have been discovered in the last decade, and having in mind the competition from these other fuels, it is likely that we will ever reach, apart from a period such as the war, a period when we will have the level of production of bituminous coal we had in 1929.

Dr. MACKEY: I think with the increase in population, Mr. Chairman, that we should reach easily the 1929 production. I think, however, that there has been a very heavy wastage of our coal resources and that that should be taken into account. For instance, take the Corbin area, B.C., a very small field. You can see a great deal of the coal exposed on the surface. We estimated the amount of coal in that field to be 85,000,000 tons available. They have extracted about 3,000,000 tons and the field is now closed up.

The CHAIRMAN: That place is closed?

Dr. MACKEY: That place is closed. I think part of the town has moved away. Well, there is no reason for such a big loss in our coal resources as that. I think with careful mining and with development of the markets we can easily reach our 1929 production. Then, there is the possibility which has been brought up of western coal being briquetted. The Canmore coal has been briquetted and shipped as far east as Montreal. They are making a good anthracite briquet. In the Crow's Nest Pass at Coleman they have been briquetting coal. In some

places there is a big possibility of increasing our coal sales by briquetting and also from the population that will likely set in after the close of the war. There has been some mention about the Hudson Hope coal. Most of that is not a good coking coal. There are a great number of seams there, but when you take into consideration we have some very small seams, a fraction of a foot to two or three inches thick—there have been over forty of them measured, but there are only about five or six that are over four feet or more in thickness. Our early estimate for that field was considerably higher than what you would put it at now. We have had detailed work done there and an estimate of about 88,000,000 tons of coal—

Mr. MACNICOL: Including the Bullhead mountain?

Dr. MACKAY: Yes, the Bullhead mountain area. The coal occurs in the Gething member, and our mapping in there shows that formation to underlie an area of about 75 square miles; so that if you take the average thickness say, of the recoverable coal in that section that was only five feet, over that 75 square miles you would have an estimate of approximately 225,000,000 tons.

Mr. MACNICOL: The department's first circulars in reference to that coal estimated 600,000,000 tons.

Dr. MACKAY: Yes, but that estimate of 1913 is not an estimate to be considered by mining engineers. The Canadian Committee of the Geological Congress was asked to undertake the study of the coal resources of the world and give an estimate of Canada's coal resources as compared with those of the other countries of the world, and they set the standard of comparison on which we were to work, the common denominator. The standardization they set up was to include coal seams anywhere from a foot in thickness up, to a depth of 4,000 feet. In Canada, you cannot mine a seam a foot thick to a depth of 2,000 feet; so that the estimate is only a comparative estimate, and if you changed the figures for the Canadian estimate you would upset the whole structure.

Mr. MACNICOL: You now figure about 220 million tons is the maximum?

Dr. MACKAY: No, because a large portion of the Peace River area is still unmapped. With the over-development of the coal-mining industry the Geological Survey was asked not to go ahead with extensive mapping of these unexplored coal areas because it would result in intensifying the situation, making it worse. As a result of that we turned our attention towards the assistance of the mines that were already under development. Because when you were mapping out these coal formations, you had a gallery of promoters right behind you, wanting to take up available coal territory and interest parties in its development. Then it was a case of application for subvention assistance to sell coal in the markets where the companies that were already operating were selling. So that we have not made an attempt at that. A re-estimate can only be done by extensive field work and intensive field work. You may have a seam outcropping, and you find it is five feet here; you may go two miles away and may find it only one foot there, or it may not be there at all. Your estimate is based on the information that you have. That estimate was based on the figures we had, showing the areal extent of the coal-bearing formation and the probable continuance of the various seams we had observed.

Mr. MACNICOL: You referred specifically to the Gething formation.

Dr. MACKAY: Yes.

Mr. MACNICOL: Is that not more than five feet thick?

Dr. MACKAY: The Grant seam is just about five feet. It may, in some places, go to about seven and a half feet, but in other places it is down to three, so we took about five feet as an average. In Canada we have much available coal in sight. Under ordinary conditions, it is a case of lack of markets. That is what we have to face. We are now in an exceptional condition in which there

is pressure for all the coal we can get, and we can possibly get into the difficulty again of over-expansion, and to be followed by having difficulty of finding a market.

The CHAIRMAN: Mr. MacNicol put a question a while ago which I think is extremely important. It is based on his statement, which is true, that new industries to some extent at least should be established in western Canada. Do you want to press that question to see whether our unused coal could be of use to that end for new industry?

MR. MACNICOL: Dr. Gilmore kind of threw me off that. I gathered from Dr. Gilmore's reply that our coal has not the same properties as has the coal he used as an example, namely the Yorkshire coal. I gathered from his reply that those using Yorkshire coal would be able to manufacture at a lower price than if they used western coal. On the other hand, I personally feel that if we do make any development in Canada along the lines we have been talking about this morning, industries should be developed in western Canada and in eastern Canada, in Nova Scotia and in the west where the coal is, the only coal we have.

DR. MACKAY: I think Mr. Gilmore's statement was not very far out. He stated that there was 160 gallons of crude oil produced per ton from the Yorkshire coal as compared with 155 using the Sydney and the same for Crow's Nest. So that is practically comparable.

MR. MACNICOL: I missed that. I did not get the figures right.

DR. MACKAY: We have as good cooking coal in the Crow's Nest Pass as anywhere that you would want to get. There is an abundance of coal there. There is a great number of mining centres that have good coal, some easily available, and a poor grade in others. But I think, if there is going to be industries established, a logical place to establish an industry, would be in the Crow's Nest Pass, because you have half a dozen companies that could contribute towards that development.

MR. MACNICOL: And cheap power.

DR. MACKAY: Yes; and cheap power.

MR. GILLIS: Mr. Chairman, I should like to deal with that question of Mr. Martin's. I do not think it was answered, as I understood it. I think what Mr. Martin had in mind when he asked his question was the possibility of restoring the market to the Canadian coal industry which existed previous to the war. We know that since the outbreak of war we are taking in twice the amount of American coal, and as the result it has gone into the markets that were available to Canadian industry previously, assisted by the government. For example, American coal is going as far east as Riviere du Loup. They have taken over the whole Quebec market. Nova Scotia is only supplying the needs of the Maritimes now. The same conditions exist in the west. In the last war we had that same situation. It cost the government about \$18,000,000 to reclaim the Quebec market. I think what Mr. Martin has in mind is that when the war is over, and your war industries that are using coal in the east and west will be closed up, there will be a shrinkage to that extent in those industries. Are you going to give the same old consideration again and subsidize your industry to put it on a competitive basis with the American industry? If we do not want to come to that, the logical thing, I think, is to make an examination of the possibilities of the establishment of peacetime industries east and west that would take up that slack and leave the coal market as it is. I think that is what was behind Mr. Martin's question. I should like to have the gentleman's opinion on that, because it is definitely something we have to face.

DR. MACKAY: I think, in sizing up the situation, unless we do as Mr. Gillis suggests, we are bound to have to rely on the government for assistance for these coals, both in the west and in Nova Scotia, to dispose of coal in the Ontario and central Canada markets by subvention assistance.

Mr. MACNICOL: There is not any other way.

Dr. MACKAY: That is the problem confronting us and one that we have to canvass and see what possibilities there are of establishing markets where the coal could be used closer to the areas in which they are mined.

Mr. BLACK: That is not what we are meeting here for this morning, as I understand it. These matters were discussed, and while they are very vital and they are very important, what we are here for this morning is to get information and recommendations from these gentlemen as to the possibilities of utilizing the coal east and west in a chemical way. I think what we should have is definite recommendations from them as to what utilization might be made of the coal, how much employment it would give, how much tonnage it would use; and then if they are not prepared to make definite recommendations, let them make suggestions as to the possibilities of utilizing the coal and giving employment for re-establishment after the war and utilizing an increased tonnage that is not now being utilized. That is what I should like to hear from them.

Mr. MCKINNON: There has been considerable discussion on the briquetting of coal. Thirty-five years ago or so, the C.P.R. used to use briquets quite extensively in their locomotives out around Calgary. Since the installation of mechanical stokers, they are using that same coal without the necessity of briquetting. So I would imagine, that as far as the steam railways are concerned, the use of briquets is a thing of the past. You would have to find another market.

The CHAIRMAN: Does that mean that they use another type of coal different from that from which the briquetting was done?

Mr. MCKINNON: No. With mechanical stokers you can use a very inferior grade of coal, and that is what they are doing. An inferior grade or scrap that used to be used for briquetting is now used through mechanical stokers.

The CHAIRMAN: Is that mechanical stoker suitable for use other than on railways?

Mr. MACNICOL: In large installations.

Mr. MCKINNON: Yes, it is. They have it on a smaller scale, of course, in large buildings. But I would imagine that briquetting, as far as the railways are concerned, is a thing of the past.

Mr. MARTIN: How many by-product coking ovens have been built in Canada within the last ten years?

Mr. GILMORE: There is only one at Sault Ste. Marie. It is, I believe, a Curran-Knowles oven. There is another one at Hamilton. That makes two. Other plants have been enlarged. Hamilton Steel enlarged theirs, I believe. That is equivalent to a new plant. I do not know about the Soo, but I believe they enlarged their plant. Sydney put into use a plant, a new plant, that had been built but not used. So that, although the extension of new by-product plants has not been noticeably large, it has been going on steadily in the last ten years.

Mr. MACNICOL: Is there not a new plant in Hamilton? I am not sure that it is in operation, but I believe it is to be based on the same process that is being used in Owen Sound.

Mr. GILMORE: Yes. That is the Curran-Knowles' oven.

Mr. MACNICOL: Are they not also at the present moment at some plant in Kitchener, Ontario, developing the same process for the use of these coals or any kind of coal for the production of everything you have been talking about this morning?

Mr. GILMORE: We are waiting for a report on Kitchener and Waterloo.

Mr. MACNICOL: Waterloo I guess is the place it is in—Waterloo town.

Mr. GILMORE: Yes. if I may, I should like to answer the questions that Mr. MacNicol and Mr. Black asked. In connection with the liquefaction of coal, that means the production of crude oil with its many by-products, I should make a small correction. The Yorkshire coal yield is 160 gallons. Those are imperial gallons I am quoting. Sydney coal is 155 and Crow's Nest coal, 140. Then it goes down steadily for the lower rank coals.

Mr. MacNICOL: I am glad to hear those figures. I got the impression first—and perhaps I misunderstood—that our coals were not nearly as comparable as those figures show they are with the best coals they have across the water.

Mr. GILMORE: We have two coals in Canada that closely approach the better coals in England, which would be in the Sydney area and in the Crow's Nest Pass area. Then when you get into our free-burning, non-caking coals, the so-called domestic or sub-bituminous coals in Alberta, the yield falls off, as I pointed out. But that does not say that they are not being and should not be worked on. More work should perhaps be done on them; because for the sub-bituminous coals, the yield of tar acids goes up, and you get quite an appreciable yield of phenols which Dr. Cambren has pointed out is valuable for the plastic industry. We are alive to the need of more work on these lower rank coals.

The CHAIRMAN: How about Saskatchewan coal?

Mr. GILMORE: That is pretty well down to the bottom, and should not be considered.

The CHAIRMAN: Have you given much thought to the possibilities of establishing plastic industries any further after the war?

Mr. GILMORE: There are three research organizations in Ottawa working on that, and all co-operating with each other.

The CHAIRMAN: They are all co-operating.

Mr. GILMORE: Yes.

The CHAIRMAN: They have not reached any conclusions yet?

Mr. GILMORE: No. The problem of the plastic industry in Canada at present is mainly to get the raw products, which are phenols benzols styrene etc. That is the main interest just now.

Mr. BLACK: What are the practical possibilities of using Nova Scotia coal for establishing chemical industries?

Mr. GILMORE: I think they are as good as the Pittsburgh field, for example.

The CHAIRMAN: They are as good as the Pittsburgh field, you say?

Mr. GILMORE: I would say so.

The CHAIRMAN: Would that be so having regard to cost as well?

Mr. GILMORE: Cost is a different matter.

The CHAIRMAN: But the coal itself is as good?

Mr. GILMORE: Yes.

Mr. ROSS: What by-products are being made from coal at the present time that were not made before the war? What has the war developed? What has been the development as the result of the war?

Mr. MARTIN: You mean the present war?

Mr. ROSS: Yes, the present war.

Mr. GILMORE: I do not think there are any new products, but there are increased uses of the products required for plastics and explosives.

Mr. ROSS: From coal?

Mr. GILMORE: Yes.

Mr. ROSS: What, for instance?

Mr. GILMORE: For explosives, toluene for making T.N.T. is needed. That comes from coal tar and from other sources as well. The phenol is required mainly for plastics. Then there is benzol from which they make styrene for the plastic industry including synthetic rubber.

Mr. MARTIN: You cannot get anything like butane or propane?

Mr. GILMORE: No.

Mr. MARTIN: You really have to have natural gas?

Mr. GILMORE: Natural gas and petroleum.

Mr. MARTIN: You cannot get them at all?

Mr. GILMORE: No, not in commercial quantities.

Mr. Ross: Where are those plants established at the present time? Are they near mines or is the coal hauled to them from a long distance?

Mr. GILMORE: The larger by-product coke ovens are at Sydney, which is near the mines; Montreal, which is away from the mines; Hamilton, which is away; Sault Ste. Marie, which is away; Winnipeg, which is away. So there is only really one near the mines.

Mr. Ross: Only one near the mines?

Mr. GILMORE: Yes. And that is at Sydney.

Mr. MACKENZIE (*Neepawa*): Mr. Chairman, I do not think that we have ever had in this committee a complete survey of the mine fields of Canada.

The CHAIRMAN: No.

Mr. MACKENZIE (*Neepawa*): Giving the quantities and the different formations.

The CHAIRMAN: You mean the coal mines or general mines now?

Mr. MACKENZIE (*Neepawa*): This is coal, to a great extent.

The CHAIRMAN: Yes. Mr. MacKay could perhaps give us that now.

Mr. MACKENZIE (*Neepawa*): If he could give it briefly, I should be glad. I think Mr. MacKay did something with the western fields. I think it would be worthwhile for the committee to have that when they are considering this. In that connection, Dr. MacKay you spoke about Hosmer. Was it Hosmer you spoke of that was closed?

Dr. MacKAY: No, Corbin.

Mr. MACKENZIE (*Neepawa*): Hosmer mine was closed?

Dr. MacKAY: Yes.

Mr. MACKENZIE (*Neepawa*): It has never been opened.

Dr. MacKAY: No. There is always the case of competition in prices, and the cost of mining at Hosmer was found to be in excess of that at mines more easily opened.

Mr. MARTIN: Was there not something in connection with the difficulty of mining on account of fire damp also?

Dr. MacKAY: Yes, and blow-outs. I do not know just how extensive that question is which you asked regarding the coal fields, or just what you want on that.

Mr. MACKENZIE (*Neepawa*): Where they are located.

Dr. MacKAY: We turned out a little map showing the coal fields of Canada compared with the coal fields of the United States, and that can be obtained from the Fuel Board in the reports. It is just a miniature of the larger map that we have in which we show the extent of the coal-bearing formations and the different classes of coal and the important producing centres in these different areas.

Mr. JEAN: Mr. Chairman, could we have some of those?

The CHAIRMAN: I will get this, and we will try to get some more. May I have one of those from you?

Dr. MACKAY: Yes.

The CHAIRMAN: Have you some others?

Dr. MACKAY: I have a few here.

Mr. MACKENZIE (*Neepawa*): That could not be put in the report, I suppose, Mr. Chairman?

The CHAIRMAN: I do not know if a map could be put in very well. But I can get enough to circulate among the members, perhaps. All right, Mr. MacKay.

Dr. MACKAY: From this map you see the distribution of the three different classes of coal. Lignitic deposits, which are the poorest grade coals, cover southern Saskatchewan and eastern Alberta. In Alberta, the coal known commercially as domestic coal, is of a little better grade. As you approach the mountains, there is a progressive reduction in the moisture content of the coal, and a progressive increase in the carbon content, and consequently it becomes a higher rank coal. So that the coal in central Alberta is now classified by the Canadian Classification Committee as a sub-bituminous coal rather than a lignitic coal. Further west there is this narrow belt, shown in colour, which is again higher in carbon, lower in volatile, and lower in moisture, and it has been classified as a high volatile bituminous coal. Further west, from Fernie up toward Canmore, you are into the coking bituminous coals. That continues on up, as you see, in those red coloured areas, to the Peace river block, where Hudson Hope coal field is located. Some of the coal there is coking, but the greater part of it is a higher ranking coal that has gone beyond the coking stage and is of a semi-bituminous rank. There are other coal fields further west and extending in a northwesterly direction to Liard river. The Alaska highway extends northwesterly and close to it there are some lignite coal and some bituminous coals. There are coal deposits in the Yukon at Whitehorse, at Tentulus Butte and on the Salmon river. Some of the coal is good coking coal and others have been altered by igneous intrusive rocks so that they are high in ash and low in volatile and are poor coking. In central British Columbia you see all these green areas of the Nicola Valley and Princeton fields and other areas in the Thompson river as at Coal Creek, Hat Creek; they are sub-bituminous coals. And coming on to Vancouver island, you have an area of bituminous coking coal.

Mr. MARTIN: What about the Caribou there?

Dr. MACKAY: Up in Caribou it is a lignitic coal and on Bear river you have some coking bituminous coal.

Mr. MACKENZIE (*Neepawa*): You do not show a great deal of coal around James bay. I wonder if you could make some comment on the lignite deposits there?

Mr. MACNICOL: In northern Ontario, on the Onakawana field?

Mr. MACKENZIE (*Neepawa*): Yes.

Dr. MACKAY: The deposits there are of the Lower Cretaceous age, the same age as the coals in Alberta. They have not been subject to the pressure or the heat developed by that pressure that the Alberta coals were, and they are still in the lignitic state. They are a poorer grade or rank of coal than is the poorest Saskatchewan coal. The moisture content is running about 52 per cent.

Mr. MACNICOL: That is higher than anywhere?

Dr. MACKAY: Yes. The deposits over much of the field are lying from thirty-five feet to sixty feet below the surface. There are thick seams, twenty feet thick in some places, over forty feet thick in others. But you go down

the shaft and along the roadway and you will see a tree lying in this deposit. If you try to chop the tree, your axe will sink into it and stay there, and you will have difficulty in pulling it back out.

Mr. MACNICOL: What would make it do that?

Dr. MACKAY: It is a tree. It is carbonized wood. It is part of the deposit. Those deposits are lying under a flat area estimated at about three square miles. You would have to mine the deposit, you would have to bring it to the surface, and you would have to dry it out, either by atmosphere or by some process of forcing steam into it and drying it mechanically.

Mr. MACNICOL: It is steam you are going to use?

Dr. MACKAY: Yes.

Mr. McNIVEN: The moisture content of Saskatchewan lignite is 30 per cent.

Dr. MACKAY: In some places it is 30 per cent and in some places it is higher.

Mr. McNIVEN: The coal that is being mined?

Dr. MACKAY: Yes.

Mr. McNIVEN: Do you know the moisture content of the coal in Germany on which their dye and chemical industry is based?

Dr. MACKAY: I do not know. I imagine it is not nearly as high as the Onakawana coal, the northern Ontario coal.

Mr. MACNICOL: Not nearly as high?

Dr. MACKAY: No.

Mr. MACNICOL: But Germany has not any coal such as Yorkshire coal or Michel in this country?

Dr. MACKAY: Not that I know of.

Mr. MACNICOL: Their whole chemical and dye industry is based on the lower grade of lignite?

Dr. MACKAY: Yes. Much of it is a lower rank coal.

Mr. MACNICOL: Comparable to what they have in Australia?

Dr. MACKAY: Yes. It is a brown coal. The German coal that they are using is a brown coal of lignite rank, so that it is much lower in rank than our Michel or Sydney coals.

Mr. MACNICOL: However, with that coal as a base, they have developed a high degree of efficiency in the manufacture of dyes and chemicals.

Dr. MACKAY: Germany?

Mr. MACNICOL: Yes, Germany.

Dr. MACKAY: Yes, it has.

Mr. MACNICOL: I have one other question. You spoke about briquetting. Is creosote oil a by-product of briquetting?

Mr. GILMORE: No it is a by-product of the carbonizing process which precedes the briquetting of the Saskatchewan lignite.

Mr. McNIVEN: Is it not a by-product of either the Canmore or Blairmore coal?

Dr. MACKAY: It would be a by-product of Crow's Nest, including Blairmore, not of Canmore. Canmore is a high rank coal, an anthracitic coal.

Mr. McNIVEN: Where do the creosoting companies get their creosote in Canada?

Mr. GILMORE: Mostly from the by-product coke ovens—Sydney, Montreal, Hamilton and Sault Ste. Marie.

Mr. McNIVEN: Do they import creosote oil?

Mr. GILMORE: I do not know. I imagine they do at times. There are two other sources of creosote oil. A new plant at Michel, with Curran-Knowles ovens, is producing creosote oil; and creosote oil is produced at Estevan from their carbonizing and briquetting operations.

Mr. MACNICOL: I have just one question before you rise. Dr. MacKay referred to the Gething mine coal or Bullhead mountain coal. I should like to ask a question in reference to that. Northern Alberta engineers inform me that it was tried on the northern Alberta railway company, if that is the right name, in their engines, and they found it most satisfactory for the production of steam. Is it your opinion that it is good for that purpose?

Dr. MACKAY: It is splendid; one of the best coals in Canada.

Mr. MACNICOL: Yes, I thought so.

Dr. MACKAY: At the present time it is inaccessible. Some of the engineers were using it up there on the Alaska highway, but they figured it was costing about \$75 a ton; they were going in and getting it and bringing it out.

The CHAIRMAN: They are bringing quite a bit of it out now. They are improving the road.

Dr. MACKAY: What they were doing was this. They were including in the cost of their men's time and all the equipment that was being used. In mentioning the distribution of these coal fields I took it for granted, of course, that there were many areas that are shown on the map that I would not need drawing attention to. There are the large deposits of the Cape Breton fields, at Glace Bay; in Nova Scotia, at New Glasgow; and then the Minto fields in New Brunswick.

Mr. MACNICOL: I move that we adjourn.

The CHAIRMAN: Before we adjourn, I should like to ask Dr. Steacie to answer just one word in reply to a question by Mr. McNiven about the type of coal upon which a chemical industry may be based.

Dr. STEACIE: I understand no specific answer has been given to the question as to whether it would be possible to base a Canadian chemical industry on coal the way the German industry has been based. The answer is that any coal which will give rise to benzol and tar as by-products will do. There is ample Canadian coal; there is therefore no physical reason why a Canadian Chemical industry should not be based on coal. Again it is a question of markets.

Mr. MARTIN: Mr. Chairman, you should have on the record not only the names but the posts that these four gentlemen hold.

The CHAIRMAN: We have that for the record.

A motion to adjourn is in order, but before we adjourn I want to thank these four gentlemen for the time and study which they have given this subject, and I agree with Mr. MacNicol it has been a profitable morning. Possibly we can make recommendations later on concerning new industries in certain parts of the country as a result of information gleaned here this morning.

Mr. MACNICOL: I move we adjourn.

The Committee adjourned at 1.05 p.m. to meet again at the call of the chair.

## APPENDIX A

## NATIONAL RESEARCH COUNCIL—CHEMISTRY DIVISION

APRIL 1, 1943.

POSSIBLE EXPANSION OF THE CANADIAN CHEMICAL INDUSTRY BY THE  
DEVELOPMENT OF NEW USES FOR COAL

The expansion, in Canada, of the organic chemical industry by the utilization of coal as raw material could successfully be undertaken after this war, preferably in locations where cheap hydro power is accessible. In fact, developments in other countries may render such a step essential for our domestic economy.

Research on coal has been the subject of intensive study first in Germany at the Kayser Wilhelm Institute since 1913, in Great Britain by the Fuel Research Board since 1917, and in the United States in the Bureau of Mines and in the Coal Research Laboratory of the Carnegie Institute of Technology since 1930. More recently, a Coal Research Laboratory has been opened at the University of West Virginia. A considerable amount of work on the chemical utilization of coal has also been done in the Fuel Laboratories of the Bureau of Mines in Ottawa, but this work has been directed mainly towards the production of liquid fuels from coal and from McMurray bitumen.

The following is a brief outline of the most important processes which have been successfully developed for the conversion of coal to useful products. In most cases the potential importance of the processes is indicated by the industrial importance of the products.

*Conversion of Coal to Liquid Fuels*

The conversion of coal to motor and other liquid fuels by hydrogenation (Bergius) and by the water-gas process (Fischer-Tropsch) was first developed and operated successfully in Germany after the last war. Since Germany is largely dependent on outside sources for petroleum, development of this process was rendered virtually a necessity when German interests in the Rumanian oil fields were acquired by British and French interests after the war. The strategic importance of this source of fuel to-day may be estimated from the fact that the production of synthetic petroleum in Germany in 1939 was estimated at 1,800,000 tons at that time. Additional plants were under way or projected to raise this figure to 4,000,000 tons. Uncertain estimates of the production to-day place that figure at 3,000,000 tons. The production of liquid hydrocarbon fuels by the high pressure hydrogenation of coal is also being carried out on a large scale by Imperial Chemical Industries at their Billingham Plant in England. Production costs at this plant cannot compete with imported petroleum products, but the difference is covered by Government subsidy. The importance of an alternative source of motor fuel on our future domestic economy becomes evident, when one realizes that the estimated proven reserves of petroleum represent about a 15 years' supply at the present rate of consumption. Coal reserves in the U.S., however, are estimated to last for the next 2100 years, and this estimate takes into account the fact that coal will eventually carry the load after oil, natural gas and oil shale supplies have been exhausted.

It may be pertinent to mention, in connection with the conversion of coal to motor fuels, that in the Bergius process only 40-45 per cent of the energy in the coal is recovered in the gasoline and still less in the Fischer-Tropsch

process. This, added to the thermal inefficiency of the internal combustion engine, results in a considerable overall loss in energy. The overall efficiency of modern coal steam turbine plants, however, is over 31 per cent. This corresponds to a coal consumption of 0.8 lbs. of coal/kw. hr. This will influence future trends in the use of coal as a source of energy.

#### *Industrial Processes Utilizing Coke Oven By-Products*

The industrial importance of products hitherto obtained directly from or by further processing of coke oven by-products is well known. It may be useful, however, to mention some of the newer developments in this field.

The following industrial chemicals are now manufactured on a commercial scale or processes have been developed for their manufacture from coke oven by-products.

##### *Ethyl Alcohol*

Cie de Bethune in France and the Societe d'Ougree-Marihaye in Belgium were, before this war, producing ethyl alcohol from ethylene recovered by liquid fractionation of coke oven gas.

##### *Butadiene*

Koppers Corporation have worked out a process for producing butadiene starting from coke oven benzol. This is a fully developed process which has been given a place in the synthetic rubber program in the U.S.

##### *Cumene*

This is a new blending agent used in aviation gasoline and which is now being produced on a large scale in several refineries, using coke oven benzol as starting material.

##### *Phenol*

Only 20-25 per cent of the phenol produced in the U.S. is obtained directly from coal tar, the remainder is synthesized from benzene. In 1940, 93,000,000 lbs. of phenolic resins were produced in the U.S.

##### *Phthalic Anhydride*

The starting material for the manufacture of this chemical is naphthalene also recovered from coal tar. The consumption of this chemical in 1940, in the U.S., was 85,000,000 lbs., mostly in plastics.

##### *Styrene*

The styrene required in the present synthetic rubber program is derived from coke oven benzol. 200,000 tons of this chemical will be required annually when the full U.S. rubber program gets under way.

##### *Nylon*

Nylon, which, with synthetic rubber, has become of primary strategic importance in the present war, is another product which is derived from coal.

#### *Chemical Products Derived from Coke*

It is well known that a large and important industry in Canada is based on the utilization of coke for the production of calcium carbide, from which acetylene is derived, and this versatile chemical then enters into the manufacture of a long list of chemical products such as acetic acid, acetic anhydride and the vinyl plastics.

There are, however, two chemicals which have become of increasing importance in the past twenty years, and which are industrially derived from coke. The production of synthetic methanol from coke is largely responsible for the rapid development of the plastics industry. To produce methanol, coke is reacted with steam to give carbon monoxide and hydrogen, which are then combined over a catalyst under pressure to form methanol.

A large fraction of the hydrogen required for the synthesis of ammonia, which is used in fertilizer and explosive manufacture and in other industries, is also obtained by the action of steam on coke. The consumption of coal in the production of the above two chemicals is now estimated to be several millions tons annually.

It is hoped that these sketchy notes will serve to show the trend of developments in the utilization of coal outside of the use of this vital material as fuel and in metallurgical processes.

A. CAMBRON.

Doc.  
an  
Com  
R

Canada Reconstruction and Re-establishment  
Special Committee 1943/44

SESSION 1943  
(HOUSE OF COMMONS)

(SPECIAL COMMITTEE)

ON

**RECONSTRUCTION AND RE-ESTABLISHMENT**

MINUTES OF PROCEEDINGS AND EVIDENCE  
No. 7

WEDNESDAY, APRIL 7, 1943



**WITNESSES:**

Mr. George Spence, Director, Prairie Farm Rehabilitation, Regina.  
Dr. E. S. Archibald, Director, Dominion Experimental Farm, Ottawa.

OTTAWA  
EDMOND CLOUTIER  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1944



## MINUTES OF PROCEEDINGS

WEDNESDAY, April 7, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11.00 o'clock, a.m. Mr. J. G. Turgeon, the Chairman, presided.

The following members were present: Messrs. Authier, Bertrand (*Prescott*), Black (*Cumberland*), Brunelle, Castleden, Gillis, Hill, Jean, MacKenzie (*Neepawa*), Mackenzie (*Vancouver Centre*), MacNicol, McKinnon (*Kenora-Rainy River*), McNiven, Matthews, Nielsen (*Mrs.*), Quelch, Ross (*Calgary East*), Sanderson, Turgeon, and Tustin.—20.

*In attendance were:* Dr. E. S. Archibald, Director, Experimental Farm, Ottawa; Mr. J. D. Cameron, Special Representative, Canadian Pacific Railway.

The Chairman made a correction in the evidence of the previous meeting where the town Thorburn was referred to as Coburn.

Mr. George Spence, Director of Prairie Farm Rehabilitation, Regina, Saskatchewan, was called and examined.

A large map was displayed to illustrate where work was required and being done.

Mr. Graham, M.P., with the permission of the Committee, examined the witness.

The witness filed the following:—"Fifth Annual Report of the Secretary of the Land Utilization Branch of the Department of Agriculture, Saskatchewan."

"The Keystone Province, Manitoba, for March and April, 1942."

"St. Mary and Milk Rivers Water Development Committee Report on further storage and irrigation works required in Southern Saskatchewan."  
Dr. Archibald was called and examined.

By leave, Mr. Gershaw made suggestions to the Committee.

At the suggestion of Mr. McNiven it was agreed that Mr. Spence should show to members of the House at 8.00 o'clock, Friday night, lantern slides depicting the work of Prairie Farm Rehabilitation.

On motion of Mr. McNiven the Committee adjourned at 1.05 p.m. to meet again Thursday, April 8th at 11.00 o'clock, a.m.

J. P. DOYLE,  
*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

APRIL 7, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11 o'clock a.m. The Chairman, Mr. J. G. Turgeon, presided.

The CHAIRMAN: Gentlemen, we have a quorum. We have before us to-day Mr. George Spence who, as you know, is Director of Operations under the Prairie Farm Rehabilitation Act. He has come from Regina to give us the story, and I shall ask him before he speaks to give his full title to the reporter.

Before we call on Mr. Spence may I say that last session when we were talking of coal in Nova Scotia the name Thorburn came up. I think it was either Mr. Gillis or Mr. McCulloch who mentioned Thorburn. Mr. McCulloch spoke to me yesterday and informed me that the record says Coburn and asked me to have that changed to Thorburn.

I should like to make a suggestion to you also, Mr. Spence, in giving your evidence and speaking of territorial areas I should like you to mention names, because if you point to the map and say, "here" and "there" the reporters do not know just what you are talking about. I hope you keep that in mind.

Mr. GEOGRE SPENCE, Director of Prairie Farm Rehabilitation, called:

The WITNESS: Mr. Chairman and honourable members of the committee, my official title is Director of Prairie Farm Rehabilitation, with headquarters in Regina, Saskatchewan.

Now, I think it might facilitate discussion and also eliminate needless consumption of time if I read a manuscript to the committee. If during the reading of the manuscript I am not making myself clear it will not worry me in the least if you draw my attention to some particular thing; and, of course, at the close of the reading of the manuscript I will be open for questions. I have prepared a map here and perhaps with the help of this map we can get an understanding of the problem and the things we have been talking about.

*By Mr. Jean:*

Q. You have not got a copy of your manuscript available for the members?  
—A. No, I had a few spare copies, but I am afraid I have given them all away already.

*By the Chairman:*

Q. Would you like to break your manuscript up into parts and then be asked questions on the different parts?—A. I can do that, although there is this about it, the whole thing ties into a pattern or framework, if I may put it that way, so that you almost have to hear the full story. So many things are cleared up as you go along that I think that is a better way to do it. However, I will leave myself entirely in the hands of the committee.

### *Rehabilitation of Agriculture*

Because of its importance in the national economy, the rehabilitation of agriculture must be placed in the forefront of the post-war programme. Agricultural and industrial development are complementary, one to the other. As a country becomes more highly industrialized, a greater home market is

automatically created for agricultural products. Not only that, but a much greater variety of higher priced products can be economically produced for that market, with the further result that a greater number of people can be gainfully absorbed in agricultural pursuits. The beneficial results are therefore accumulative and, as the agricultural industry becomes more stabilized under greater industrialization, the whole economy of the nation, internal and external, is broadened and strengthened by this process.

It follows, therefore, that in any plan of economic readjustment, agriculture and industrial development should be considered as joint enterprises and treated as such. Agricultural prosperity is so basic to national well-being in this country that full industrial development cannot be reached unless agriculture is developed and maintained at the highest level which can be attained under the climatic and soil conditions which exist. The Prairie Farm Rehabilitation administration is concerned more particularly with the rehabilitation of agriculture in areas where adverse conditions, such as climatic variability and other natural hazards, have proved so disastrous in the past.

In an effort to meet this situation parliament passed the Prairie Farm Rehabilitation Act. Under the authority of this Act certain sums of money are spent from year to year on a long-time programme—a programme that has three main objectives, namely, conservation, reclamation and rehabilitation.

### *The Act*

A word about the Act itself: In framing the legislation parliament was careful to lay down policy in general terms only. It gave authority "to secure the rehabilitation of the drought and soil drifting areas in the provinces of Manitoba, Saskatchewan and Alberta." Under the terms of the Act the Minister of Agriculture is authorized to introduce throughout the affected area "systems of farm practice, tree culture, water supply, land utilization and land settlement that afford greater economic security" to prairie farmers.

The Act was amended in 1937 and again in 1939 and 1941. The amendments, introduced by the present Minister of Agriculture, greatly enlarged the scope of the Act and also clarified the authority of the minister. In the amended Act there is provision for one or more "advisory committees." This has proved to be a very wise provision, as the committees now functioning have been a real strength to the administration.

The membership of the advisory committees is drawn from the financial and business life of the country. Agriculture is specially represented on the committees by active farmers presently on the land, one from each of the three provincial rural municipal bodies. Assisting the advisory committees and associated with the executive officers of the administration are recognized specialists in cropping and tillage practices, soils research, irrigation, insect control, plant disease and related matters. This set-up also includes representatives of the provincial and federal departments of agriculture, together with the appropriate divisional heads of the three provincial universities. In short, a great galaxy of special and practical knowledge is brought together in a common pool and applied to the solution of the problems encountered.

It will be seen, therefore, that in working out a sound and comprehensive plan of rehabilitation for the low rainfall area in the prairie provinces, the federal Minister of Agriculture is not proceeding along an uncharted course. On the contrary, he has before him the sign-posts of practical experience, supplemented with a great mass of ascertained scientific data—the records of years of careful research and investigation by our colleges of agriculture and dominion experimental farms—all of which is being collected, sifted, co-related and built into the framework of Prairie Farm Rehabilitation policy. I am sure, Mr. Chairman, that it will be a source of some satisfaction to this

parliamentary committee to be assured that every reasonable precaution is taken to see that public money is not wasted on visionary and unsound undertakings.

### *Administration*

I want to say a word, too, about the administration, some features of which are unique, in that formulæ had to be found to meet many varied and exceptional situations. This is evident from the diversified nature of the work itself, and also the necessity of accommodating procedure to different governing bodies—federal, provincial and municipal. The administration has not only to accommodate itself to three different and separate jurisdictions, but it has also to live and work with many different departments in each of the three provinces—Agriculture, Land and Resources, Education, Attorney General and Municipal, to mention some of the more important.

Executive responsibility is entrusted to heads of branches engaged in different activities. Experience and a working knowledge of the problems confronting them are looked upon as special qualifications for all those who fill responsible positions in the administration. As much of the work is in the skilled and scientific category, specialists of one kind and another are employed in the different branches of the service, for example, in the Water Conservation Branch the field staffs are headed by qualified engineers and specialists in irrigation; in the Land Utilization Branch the services of soil experts are enlisted; practical agriculturists are also employed to supervise and direct certain activities which require field experience as well as technical knowledge.

From what I have just said it will be seen that care is taken to secure and maintain a staff, adequate in number, well equipped with scientific and technical knowledge and fortified with a background of practical experience. In combining the scientific with the practical in this way, the best results are obtained and the best all-round service is given to the public.

The policy adopted at the beginning and continued since, of centralizing authority in one department, under one minister—the federal Minister of Agriculture—has given strength and stability to the whole organization. It insures continuity of effort in ways found to be most beneficial and necessary in rounding out a long-range programme. This centralization also makes possible a degree of coordination which would not be possible under separate or divided authority. This coordination is particularly desirable and necessary in view of the fact that all P. F. R. A. activities are carried on under provincial laws and regulations. This being the case, no stone is left unturned to effect and maintain a very close-knit cooperation with the different departments, together with the different branches of the different departments participating in rehabilitation work.

To effect this cooperation various formulæ are used. The provincial offices of the water rights branches, staffed with P. F. R. A. engineers and other employees, are among the agencies employed to effect harmony and maintain a day-to-day contact as the work expands. Another method is joint membership on boards and working committees, where difficulties in administration and methods of procedure are taken to the conference table.

I must emphasize this is a very necessary part of our work, this conference table. We do a lot at the conference table and iron out a lot of difficulties.

Policy is also defined in special agreements entered into between the dominion and the provinces covering certain phases of P. F. R. A. activities; all of which help to effect and maintain over-all cooperation between all the governing bodies—municipal, provincial and federal. This cooperation, in most cases, does not fall far short of an active working partnership. This mutuality of interest and service is, I venture to affirm, the most effective way of dealing with the limits imposed by the British North America Act.

I have been at some pains to outline the form of organization and the technique of the Prairie Farm Rehabilitation administration in the hope that the administrative experience of an organization already engaged in reconstruction and rehabilitation measures, might be constructive and useful to this parliamentary committee in framing its report to parliament. Further, I would make bold to say, that in the P. F. R. A. set-up you have the pattern of an over-all organization which will surely be needed to carry on any programme of post-war reconstruction which may be devised. Indeed, that much has been said already by certain members of the sub-committee of the Dr. Cyril James committee, before which I had the honour and privilege of making representations.

### *The Programme*

I have now come to the programme itself. If the committee will bear with me, I would like to set out, as shortly as possible, some of the things which have already been accomplished by the administration. Past accomplishment is, after all, the best criterion of what can be done in the future if the same organized and persistent effort is put forth.

The nature of the problems encountered calls for a far-sighted and consistent programme embodying a wide range of cultural activities, land utilization, water development and other rehabilitation measures. In view of the extent and intensity of the problems involved, spectacular results over a short period cannot be expected. It can be said, however, that the groundwork for a broader and more secure prairie agriculture is being carefully and systematically laid by the P.F.R.A., working in conjunction with other departments and divisions of the federal government and also with the provinces concerned.

Time will not permit a detailed statement of the many P.F.R.A. activities directly connected with the betterment of prairie agriculture. Consequently, I shall have to content myself by giving the committee a short digest or review of the principal activities where the most marked progress can be recorded.

### *Cultural Activities*

One of the most noteworthy contributions to the betterment of prairie agriculture is being made by the cultural division of the P.F.R.A.—There are three divisions, cultural division, land utilization division, and water division. It is the cultural division which is presided over by my associate, Dr. Archibald, at the central farm here in Ottawa.—this in point of the number of people benefited in one way and another, and also in the great variety of activities being carried on by that division. In the main it embraces farming practices and systems of agriculture best adapted to the climatic and soil conditions of particular regions; the principal activities include, research and experimentation, together with demonstrational work in soil drift control, soil conservation, cropping practices, insect control, grassing waste lands, range management, live-stock development and other related matters.

I may say, the cultural division works with our office. Well, it is more than cooperation, it is really coordination, and we approve, of course, certain expenditures and all that sort of thing and so it is a kind of interlocking arrangement which is very hard to explain, but it works.

It is not possible to evaluate all the benefits to prairie agriculture derived from these manifold activities. In this connection, too, there is what one might call moral or intangible values which should not be forgotten. I know of nothing more disheartening than the loss of a succession of crops from soil drifting. When soil drifting approaches "dust bowl" proportions the effect is simply calamitous. It is no exaggeration to say that its bad effects on public morale rate with tornadoes, earthquakes, pestilence and other visitations.

The direction and leadership which the cultural division of the P.F.R.A. has given to farmers in measures for the control and prevention of soil drifting is one of the most important contributions which has been made in recent times to prairie agriculture. I affirm this is so, not alone from the standpoint of financial returns, and they are great, but also for the salutary effect it has had on public morale. The farmers have been made to realize that soil drifting is a man-made problem—a problem which they can unmake by proper farming practices, or better still, by prevention rather than cure.

Here, too, cooperative methods are employed—the whole technique is co-operation—and farmers are encouraged to organize in local associations (A.I.A.'s), on the voluntary self-help principle, so that the problem can be tackled collectively in the most effective manner. The fact that the system has worked is the best proof as to the efficacy of the means employed. We can say with conviction, therefore, that future droughts will not have the same devastating effect on prairie agriculture as that which was experienced in the recent past. Soil drifting can and will be controlled. That, in itself, is an important contribution to prairie agriculture.

### *Soils Research*

The scientific basis for the proper management of prairie soils, cropping practices, moisture conservation, maintenance of soil productivity and related matters, is the soil research studies carried on in a specially equipped soil research laboratory on the Dominion Experimental Farm at Swift Current, Saskatchewan. The soils departments of each of the three provincial universities are also co-operating very closely with the P.F.R.A. in these special research problems.

### *Regrassing*

The prairie region of western Canada has been a natural grass country for untold ages. Trees just do not grow on the prairies and there is a reason for it which you will see in a minute. The implication of this basic fact is not generally recognized by farmers and others situated in the area. Great importance is, therefore, attached to the work which has been underway for a number of years testing different varieties of grasses, and working out grass rotations most suitable for particular localities.

Under the compulsion of war, the prairie farmer has had to decrease wheat production and increase the production of live stock. As grass is the most economical basis for a live-stock programme, it follows that farmers have to increase their grass acreage. This is necessary to insure a better feed supply and also to meet the increasing need for more and better pastureage. It is evident, therefore, that the cultural division of the P.F.R.A. has performed a signal service to prairie agriculture by its timely grass research work, serving as it does an urgent war need while demonstrating for all and sundry practical methods of permanent soil improvement as a basic principle of prairie agriculture.

That work is under way now.

In addition to the work with grass on the prairie farm lands, range improvement is also under way. Surveys are being conducted on the open ranges to determine carrying capacity and general improvement of the range land areas. These researches are intended to improve and preserve one of the nation's great assets—the native grass lands of the prairie provinces.

I sometimes think we do not appreciate what our grass lands mean to us.

No review of cultural activities would be complete without some reference to the tree planting and shelter belt work. This work is designed to interest not only individual farmers but also whole communities in tree planting. This programme lends itself to tremendous development, not only on the open treeless prairies, but also in regions now wholly or in part, denuded of trees.

There is almost no limit to the expansion of that programme.

### *Soil and Economic Surveys*

The scientific basis of the land utilization and resettlement work rests on a soil survey supplemented by an economic land classification survey. These soil and economic studies which are conducted by the three provincial universities, working in cooperation with the economics division of the federal Department of Agriculture, are not confined to the P.F.R.A. area. It is, however, under the land use programme of the P.F.R.A. that the studies are having their most useful and practical application, as in the case of land classification for irrigation, community pasture development and resettlement projects.

Up-to-date soil surveys have been made on well over one hundred million acres in the three prairie provinces. It should be explained here that these surveys include both detailed and reconnaissance surveys.

The greater part of the work is reconnaissance surveys only.

### *Land Utilization*

I have here a map which shows the location of P.F.R.A. projects so far constructed in the area. It will be noted, too, that projects listed for future development such as community pastures and large water development projects are also indicated on the map.

Starting at Alberta and British Columbia boundary it follows the brown line which I hope you can all see, crossing Alberta and Saskatchewan down here across the interprovincial border between Saskatchewan and Manitoba, down to the lake region of Manitoba, and down here taking in the drainage of the Red river. That corresponds with the old Palliser triangle. It is larger, but it is based on the same thing. Inside of that area we have climatic conditions which require special treatment.

The land utilization work consists mainly of getting blocks or areas of submarginal land permanently out of cultivation. Such areas are then developed as community pastures for the use and benefit of farmers and stockmen resident in the locality. Up to date sixty-seven community pastures have been completed totalling 1,250,000 acres. Three thousand miles of fence has been erected together with corrals and other stock handling facilities.

The fences would reach from Montreal to Vancouver and back part way.

With regard to land utilization measures, an agreement was entered into between the province of Saskatchewan and the dominion government whereby one and a quarter million acres of submarginal land have been withdrawn from cultivation and made available for community pasture. These "purples" have all been established, one and one-quarter million acres. The prospective areas for future development or post-war development are these areas bordered with purple.

Five hundred stockwatering projects have also been provided within the pasture areas.

Forty thousand head of cattle and fifteen thousand head of horses were pastured last year. The gross earnings for the year's operations will be approximately \$100,000. The total cost of the pastures so far completed is, in round figures, \$1,500,000. This also includes the regrassing of 100,000 acres; all of which creates 2,434,138 man-hours of labour or 243,414 man-days labour.

The committee will note that seventy-three proposed new pastures are indicated on the map. This extensive programme of new pasture construction would total roughly 1,500,000 acres with an estimated 2,300 miles of fence at a cost of \$1,358,000. This also includes a regrassing programme of approximately 200,000 acres; all of which would create 2,652,090 man-hours of labour or 265,209 man-days labour.

Briefly, the land utilization programme as it is presently being carried on includes, among other things, reclamation and land use, pasture construction, movement of settlers from submarginal areas, operation and management of

community pastures, as well as the maintenance and operation of large irrigation projects. Resolved in terms of the war effort, it means the production of more beef and mutton, more pork, more poultry and eggs, more dairy products; also more fruits and vegetables. In short, more of the "protective foods" needed to win the war and safeguard the peace.

I have dealt with two divisions of the work, cultural and land utilization, and I now come to my third division, but before I go on I shall pause for questions.

The CHAIRMAN: You have heard Mr. Spence's statement so far, and he now thinks this is a good time for him to break and answer questions and I now throw the meeting open for questions. I would ask Mr. Cameron who is an expert in natural resources and also Dr. Archibald who is here to take a seat at the table.

*By Mr. MacNicol:*

Q. I would like to ask Mr. Spence a question. I gathered from what Mr. Spence has said that the P.F.R.A. is an over-all organization that has to do with the conservation of waters in all the prairie provinces; am I right?—A. No, this territory includes the three prairie provinces—I put it this way: the area included in what we call the P.F.R.A. area is in the three prairie provinces, but it is limited to that portion—

Q. I understood from what Mr. Spence said that the P.F.R.A. had to do with the conservation of water in the three prairie provinces?—A. That is right.

Q. It is an over-all organization?—A. That is right.

Q. I would like to hear from Mr. Spence as to what has been done towards conserving the water at the source. There is only one place at which it can be conserved and that is in the headwaters of the Saskatchewan river, in the Oldman river, the Bow river, the Red Deer river, the Battle river and the North Saskatchewan at the source. I would like to know if there has been an investigation of the sources of those tributaries with regard to possible reservoirs where water can be stored in billions of cubic feet to be released down toward the east, because there is not any water flowing into the Saskatchewan of any consequence once it passes Alberta—there is no water flowing into it of any magnitude—therefore, the supply of water in any scheme of irrigation or conservation must be provided for at the source. Now, what does your organization do in that regard?—A. That is in the next part of my paper. I think I have covered the matter pretty effectively.

The CHAIRMAN: Are there any further questions on the statement which has already been read?

*By Mr. Quelch:*

Q. Is it not true that no provision is made by the P.F.R.A. as it is constituted to institute large irrigation projects—that the large irrigation projects do not come within the field of the P.F.R.A.?—A. We cannot do it now on account of the war, but we are conducting investigations all the time. The question of materials comes up and the question of labour and all that sort of thing come up. For instance, any large dam has to have steel, and you cannot get it; that is all; it is not obtainable; you cannot start a dam unless you finish it—fire and water cannot be played with.

Q. The appropriations have not been enough for large constructions like that, have they?—A. No.

*By Mr. Black:*

Q. What constitutes submarginal lands? Where do you make the divisions?  
—A. The basis of the study for submarginal lands is the soil texture itself. A soil survey is conducted by soil experts from the three prairie universities, Dr. Ellis of Manitoba, Dr. Mitchell of Saskatoon, and Dr. Wyatt of Edmonton.

Q. What percentage of the total prairie acreage would be considered submarginal?—A. Well, there again from soil surveys so far conducted I said 100,000,000 acres. There is only a very small part of that which we have a detailed survey on or what we call a land classification survey. There are so many things which determine submarginal lands. Distance from a market is one of the factors in land classification which does not enter into soil survey work. I will give you the province of Saskatchewan—this is only a very rough figure—about 3,000,000 acres, perhaps, of lands which have been cultivated are more or less definitely submarginal.

Q. Has any of that acreage become submarginal because of its use in cultivation?—A. No, it was before; it was sandy land, without a proper soil texture.

Q. It should not have been cultivated?—A. Yes. The mistake with regard to our settlement—we can all be wise after the event—was that land was blocked out and was opened up for settlement, good, bad and indifferent land, and the butcher and the baker and the candlestick maker settled on that land, and when you get a man who is inexperienced in farming who probably has no great knack at it and get him located on a quarter-section or half-section of submarginal land, he is beaten before he starts. What we are trying to do is correct those mistakes that were made when the land was settled. We cannot do that in a week or a month or a year, but we are working along the right rack.

Q. Has any become submarginal because of loss of fertility?—A. Yes, the 3,000,000 acres of land that were cultivated has become more or less submarginal and part of that is due to the fact that there was bad tillage and cultivation practice. Dr. Archibald can answer that question better than I can.

*By Mrs. Nielsen:*

Q. You mentioned the plans you had for the removal of settlers from submarginal lands. I am interested in this question because my part of the country is the extreme northwest part of Saskatchewan and we have a number of these people who were brought up there from the southern dried-out areas of the province and re-established on those submarginal lands. We have had a great deal of experience up there with people who have failed, as you say, to make a go of farming for various reasons, and I am interested in this question of their removal. Would you deal with that matter in greater detail and let us know just what you intend to do about the removal of those people?—A. It is not what we intend to do, it is what we are doing now. I am able to speak from first-hand experience to-day. I think, perhaps, you are under a slight misapprehension about these settlers. We have not moved anybody to my knowledge up north. You have in mind, I suppose, the Northern Settlers Reestablishment Branch, but that is a different organization.

Q. Yes.—A. That has nothing to do with us. The people we are rehabilitating—we have the long moves and the short moves—but we never move anyone unless they want to be moved. We do not try to regiment anybody. We try to show them the location which we have obtained in one way or another where they can better themselves and we use some persuasion no doubt to try to prove to them that they can better themselves. The movement of settlers is a human problem and it is one of the most difficult problems. For the engineering problem

there is a formulae; the human problem is a totally different thing because there are no two individuals alike. We get along with the man who has been dried out and blown out and is sick to death and who wants to get away from the country. If we can show him something that interests him there is no trouble with him. We may have trouble, however, with his wife; she may have lived there on that land and her family may have been born there and she is not so sure whether she will move or not.

You have to use tact and judgment; certainly you cannot regiment people; you cannot use any form of compulsion on them because that won't work. You have to prove to them that they are going to better themselves. Where do we put them? We find that irrigated land in most cases is the most satisfactory way of rehabilitating those farmers. There are some exceptions. Many of our settlers are advanced in years; they have spent the best part of their life on the old homestead and they cannot learn a new trade, but if there are boys in the family the problem is much simplified. The short moves are to new locations in the municipality or into a neighbouring municipality on better land. Then we have accomplished two things, we have moved a settler from a piece of sub-marginal land and we have taken the land out of production forever, we have also converted it to its best economic use, namely, pasture. As I have said, we have to re-grass that land which has been badly used.

Q. I would still like to know something about these people of whom I am speaking. They certainly came under the northern settlers re-establishment branch, but the land upon which they are located is undoubtedly land which will never sustain people, and they are still living or existing up there. How are you going to evacuate those people? Is there any such scheme? They will never be self supporting.—A. We cannot deal with them at all, unless they are within the area, and then we can only deal with them if there is a very large area within the area that is submarginal. There is a region you have knowledge of south of the Battle river that was established into pasture and we took the few settlers left in there—in area of very poor land—and moved them down onto some irrigated land or somewhere else in the municipality, or to a neighbouring municipality.

There is an area of submarginal land north of the town of Battleford and we may be able to establish a pasture in that area, and if we do then the people who are resident there now will be moved to better locations elsewhere. I see the honourable member, Mr. Gregory, is in the room; he will have knowledge of the pasture area north of Battleford.

MR. CASTLEDEN: You do not do anything with people beyond that land?

*By Mr. Gregory:*

Q. May I ask what township you refer to that the whole pasture will be in?—A. It is in several townships; it is in Rural Municipality 467, Mr. Gregory.

*By Mrs. Nielsen:*

Q. I am sorry I was not here when you made your opening remarks. Why is it your area does not go up as far as the people are settled; why is it you do not take in these farm areas?—A. It is a matter of policy; we cannot decide that; it is a matter of government policy.

The ACTING CHAIRMAN: It is a matter for parliament?

The WITNESS: Yes, that is really what it is.

*By the Acting Chairman:*

Q. Do you successfully regrass those submarginal areas?—A. Yes.

Q. What type of grass do you use?—A. We have been very successful in regrassing those areas. There again the men who do it are technical men, men from the experimental farms. They have been experimenting, as

I pointed out in the opening section of my paper, with this work for years. The cultural division has been working on this work, and they have evolved a system of treating these lands, grassing these lands, that has been almost 100 per cent successful. Not only that, but they have found a grass that is particularly suitable for that work, namely, crested wheat grass, originally from Siberia, a country with a climate somewhat similar to our own, a grass which can stand cold and hot weather and dry weather. We have been very successful indeed with this grass. We have regrassed with other grasses where humidity is greater, down in Manitoba; we use brome grass and even the clovers.

*By Mr. Matthews:*

Q. Are you referring to submarginal land or another kind?—A. Entirely to submarginal land. Our work is reclamation and rehabilitation, conservation of the natural resources, water, and land reclamation, reclaiming it where possible, the most approved methods of rehabilitating the whole country, that is, inside of our area—the P. F. R. A. area.

Q. I think probably, Mr. Spence, there might be some here who would be interested in your explanation of the factors that enter into the selection of a community pasture.—A. Well,—

Q. It is not understood.—A. Perhaps not. It is based first of all on an agreement between the two provinces. The agreement provides that the province itself will make an application to the P. F. R. A. They know what the situation is, Mr. Chairman; in a particular area. They make application to us to establish a pasture there. We then examine it. We go to our soil maps. I wish I had brought one of these maps with me, but I did not think I would be questioned in such a detailed way. These soil maps show where the submarginal areas are, and we go to these maps and we say, "Yes, it is in a submarginal area." Then we go to work. We send out our field men to make certain checks on the situation. Then we tell the provinces whether we are prepared to go ahead or not, if it is a project that we can recommend to Ottawa and they approve we go ahead and develop it. The request has to come from the province and, of course, it has to be a submarginal type of soil—a submarginal area.

*By Mr. Quelch:*

Q. What is the regulation, is the land held by the federal government for so many years?—A. Yes; in Saskatchewan the land is turned over in perpetuity; in Manitoba it is turned over on a lease basis. We have two arrangements; they both work perfectly.

Q. A 21-year lease?—A. Yes.

Q. In Alberta there are no P. F. R. A. pastures?—A. No, because there is no agreement between the dominion government and the government of Alberta. I must say this for the province of Alberta, that they were doing this work previous to the time of P. F. R. A., and they have what they call their special area, which is something like our community pasture only it is bigger, it embraces more area. They make no attempt to fence or improve it or anything like that, but the fact that they are doing somewhat similar work, there is not the same necessity for pasture development in that province; but the door is still open and Alberta may come in any day. When they do we are ready.

Q. In spite of that the contributions are made in so far as grass seed is concerned?—A. Yes, we make the grass seed contributions.

Q. No contributions?—A. No; we give the grass seed away free.

*By the Acting Chairman:*

Q. Mr. Spence, has this problem of submarginal land, the necessity of taking land out of cultivation, been aggravated by the necessity for increased production during the last war?—A. Oh, yes; I would say it was. I would say that was a very important factor, the cry for increased production. Because of that there was a tendency to break up everything. It was a situation almost comparable with what it is over in old England itself where they are breaking up parks. There was the urge; prices were high, and so on. So we are taking the title entirely away from private ownership and eliminating that for the future.

*By Mr. Quelch:*

Q. Is it not true to-day the large swing to live stock was brought about largely by the greater improvement in prices?—A. Yes.

Q. After the war are you working on the assumption that these prices will be maintained and the west will still continue to produce the same amount of live stock?—A. No, not necessarily on that basis. I will not say we are not keeping our eye on that situation. The entire basis of our work is scientific and economic to this extent, that we discourage the cultivation of land that is not suitable for crop production, we try to keep it out of cultivation. It is the land itself that counts with us. Have I made that clear?

*By Mr. Matthews:*

Q. In the matter of tree planting, does the individual farmer get in touch with your office direct or the municipality?—A. In the matter of tree planting there are two policies. The individual tree planting is something that has been going on for—I do not know how long. It is a policy that started away back thirty-five years ago, anyway. The individual could apply for and get so many trees, but to-day under the P.F.R.A. we come along and have enlarged it and say, "We will give trees to a group of farmers who will organize themselves into tree planting associations." By the way, the greatest thing in our work is cooperation. We work with the people. I could sum it up best by saying this, I do not know anything that has brought the result of scientific research and investigation more directly to the farmer than P.F.R.A. We have just closed the gap, as it were. We come along and we say, "If you will organize yourselves we will supply you with trees, thousands of trees." Now, that work to date has not made great progress, but it has made some progress.

*By Hon. Mr. Mackenzie:*

Q. What type of tree?—A. All types of trees that will grow in the locality. That is subject again to the study of the experimental farm in that particular area. If the superintendent of the experimental farm thinks that a certain tree is suitable for the area that is the tree he gets, but the soil conditions have to be studied.

*By Mr. Matthews:*

Q. Do you pay any cost except transportation?

Dr. ARCHIBALD: We do not pay transportation; we did formerly.

*By the Acting Chairman:*

Q. Any other cost?

Dr. ARCHIBALD: No cost to the government apart from the cost of the tree excepting in the tree planting associations where there is a guarantee that the work will continue, getting certain maintenance costs, the small cost of cultivation per mile, to those of the association.

Mr. GRAHAM: Although I am not a member of this committee may I seize the opportunity to ask this question?

The CHAIRMAN: Is there any objection to Mr. Graham asking a question?  
Some hon. MEMBERS: No.

*By Mr. Graham:*

Q. I was very much interested in the booklet I received yesterday morning called, I think, "Approaching Desert," by Major Duncan Douglas Stewart of Calgary. Have you seen it, Dr. Archibald?

Dr. ARCHIBALD: I cannot remember.

*By Mr. Graham:*

Q. It had to do with water conservation. It is something along the lines of the questions asked by Mr. Black as to whether the methods of farming in the prairie regions, dealt with by Mr. Spence, were such as to be accumulatively producing in greater or lesser time a desert region. His point is this, and I should like your advice as to whether your department has it in mind. Is there a sound basis to his argument that the fertility of the soil depends on its capacity to retain moisture? He suggests that our summer fallow methods are killing the plant life. In order to keep the soil clean for the crops we are supposed to grow we are deliberately removing that necessary element out of our soil in the cultivation of it and that sooner or later the soil will become less and less capable of holding moisture when it does come in the winter and summer, which he estimates to be, outside of the winter snowfall, about nine and some inches on the average, and that in turn it will destroy the bacteriological life that is an absolute essential to the chemical life of nature, which in turn would make the land reproductive. I should like very much to have your opinion as to whether your cultural branch has been looking into that matter and what has been your information as to the basis on which that argument is based.

Mr. MACNICOL: Major Duncan Douglas Stewart's submission is based on the provision of reservoirs and which is along the line of the question I asked a little while ago. The whole problem is water. That is, in fact, the question I asked you a while ago.

The CHAIRMAN: That is to be dealt with in another part of Mr. Spence's statement and I think it might be well if we permitted Dr. Archibald to answer that question and then proceed.

Dr. ARCHIBALD: Our cultural practices in the west, erroneous though they may have been, have not had any influence on climate. Precipitation is not determined by evaporation within the prairie provinces. Our precipitation is determined by evaporation away to the south, prevailing winds that carry the atmospheric humidity from the southeast to the northwest, and precipitation takes place where there is a telescoping of the northern waves of cold air and the southern waves of hot humid dry air; and there is a lot of air used in discussing meteorology, which is unsound. Now, so far as our cultural practices are concerned—

Mr. BLACK: Is there anything in this belief that a seven-year cycle occurs between dry years and wet years? In your opinion would there be any foundation for that? Is there anything in the belief that the same condition prevails in the west for seven years and then the reverse?

Dr. ARCHIBALD: I do not know that there is a seven-year cycle, Mr. Black, but so far as our meteorological records are concerned it would appear that there are long-time cycles of precipitation high and low; but we have no meteorological records on this continent sufficiently long to establish that at the present time. Now, so far as our cultural effect on soil precipitation is concerned, the question

is perfectly sound. Continuous summer fallow in the dry area or alternate summer fallow and crop, which means working the land continuously, has destroyed to a large extent the soil fibre.

Mr. GRAHAM: Without any legume crops?

Dr. ARCHIBALD: Without any intermediate crop of grass or legume; and during the years of grasshopper pest there was not even any stubble left as residue to the one-year crop. Further, where we had the wheat, wheat summer fallow type of rotation, destruction was heavy. It was very unfortunate. Our experimental work on the forty district experimental seed stations scattered all through his area just to study the local soil conditions of different soil types has certainly shown that we can control soil drifting mechanically for the time by establishing strip farming, trash cover, and all that sort of thing; but it is only a temporary measure. Sooner or later we must have grass rotation, legumes preferably, because of the fact they yield more valuable feed, but legumes are more difficult to establish where fertility is low.

Mr. MACNICOL: You have to have water.

Dr. ARCHIBALD: Yes, but it is remarkable in the southwest part of Manitoba what we have worked seed clover into and the rotation, but we have built up our organic matter remarkably well with crested wheat grass through the means of short grass plants. Crested wheat grass is our best bet and it will develop a tough sod in two years under the driest conditions, and if it is left on for another one or two years it will rebuild the soil fibre to a very remarkable degree. So all our district experimental seed stations are working with the Agricultural Improvement Association, which embraces some 30,000 farmers or more. There are some 282 of those associations now operating. This principle is laid down: you must lay down part of your land to grass definitely; no matter if you use the balance of your land as alternate wheat and fallow, still there must be a certain section put down each year which will be sown in the third or fourth year to grass. Eventually we think, probably in a period of ten to twelve years, we will rebuild the soil fibre to an extent quite comparable to what it was when originally broken.

The CHAIRMAN: I think the committee would now like to have Mr. Spence continue.

The WITNESS: To sum up in a sentence the points discussed in the last five minutes because I think it has an important bearing on rehabilitation work everywhere. It is recognized now on this North American continent, in the United States and Canada, that it is sound agricultural practice to regionalize your work. Am I correct, Dr. Archibald?

Dr. ARCHIBALD: Yes.

The WITNESS: That is the way nature works. We have trees growing in certain localities; we have certain grasses growing in certain localities; crops that will grow in a locality and will not grow in another, and if you tried to work differently it won't work. Our aim is to work with nature in every possible way we can instead of against nature.

### *Water Conservation*

Complementary to the work of land utilization is that of water conservation, the necessity for which arises from the fact that low rainfall rather than lack of soil fertility (except in definitely submarginal areas) is the limiting factor in crop production on the open plains. I therefore submit, Mr. Chairman, that it is good economy and sound public policy to conserve by every feasible means our precious water resources so limited on the prairies, yet so very essential to national prosperity and well-being. Water is liquid gold on the prairies, gentlemen.

In furtherance of this policy, surface or run-off water is stored and put to beneficial use in many different ways and under a wide variety of conditions.

The work is grouped and classified as small water development and large water development. Small water conservation projects are designed for individual use. This program also includes larger projects designed for "neighbour" and "community" use. The very large projects are designed for organized groups of water users and for the formation of irrigation districts.

In order to stimulate and encourage the development of small water conservation projects, where topography and other conditions are favourable, financial assistance is given to individuals on a self-help basis for the construction of small dams and the excavation of dugouts. He has got to do something before he can get a grant; indeed he has got to build his project before he gets the assistance.

It is difficult to determine, in dollars and cents, the exact rehabilitation value of these small individual projects. We do know for a certainty that the value is greater, far greater, than the size of the projects would indicate. This is quite evident from the public demand for this particular type of project. We have applications for 40,000; we have only built half of them. To date, a total of well over 20,000 projects, large and small, have been completed in the three prairie provinces, at a cost of approximately \$1,850,000, a sum which does not include the contribution made by the farmers.

The small individual project is in demand mostly for stock-watering purposes. There has been a very marked increase in the number of live stock which has followed in the wake of these, and other, P.F.R.A. activities, with a corresponding increase in farm income, to say nothing of the greater security which more diversified farming brings about; all of which adds its full need of support to the national effort now being put forth in a campaign for greater live stock production on the wheat lands of western Canada. It is a source of satisfaction to know that an ever increasing number of individual projects are being used for small irrigation—feed lots, vegetable gardens and orchards.

This use of the small project is becoming more general as farmers in the dry land areas become more water conscious, that is particularly true in Saskatchewan, and as the advantages of different methods of using water for irrigation become better known—pumping, flood irrigation and the like. Then, too, the cost of upkeep or maintenance on these small projects is very low and there are no fixed annual "water charges" to meet at the end of the season. In Saskatchewan the provincial Department of Agriculture has a field staff specially trained to look after the "follow-up work" on these small irrigation projects. In the last annual report put out by the land Utilization Branch of that department, special reference is made to these individual irrigation projects. Perhaps I cannot do better than quote one short paragraph from that report, where it says: "The benefits from these projects are very far in excess of any money spent in their construction. Where there was water sufficient for only a garden there was evidence that this phase of the prairie farm rehabilitation branch was appreciated and used to the fullest extent. Gardens varying in size from half an acre up to three acres yielded food sufficient for the use of the family and in some cases, there was a surplus for sale. In some instances the sale of produce was as high as \$250 from less than an acre".

A great deal more could be said for these small individual projects, but it all boils down to one thing, the most important thing of all, namely the establishment of permanent homes—homes befitting worthy stouthearted pioneers, the men and women of this generation who by unstinted effort opened up a new land, homes in which they and their children can live in reasonable security and contentment while applying themselves anew to the great enterprise of establishing an enduring agriculture on the broad open face of the Canadian prairies.

The point I particularly want to make for the committee is this. The immediate and long time benefits of these small individual projects are so obviously a part of a reconstruction and rehabilitation program that there can be no question as to the continuation and expansion of the program. I would

say, further, that public money could not be spent in a much better cause. When the war is over and labour, materials and equipment are once more available for constructive enterprises, this small water development program offers enormous scope for peace time expansion. It is estimated that to complete the program in the present P.F.R.A. area from three-quarters of a million to a million dollars could be spent yearly, over a period of ten years. This expenditure, on the present basis, not including the farmer's contribution, would provide assistance for the construction of from 5,000 to 7,500 projects a year.

*By Mr. McNiven:*

Q. By a project you mean a dug-out?—A. Yes, on a small dam. They are not all dug-outs. It will be noted that the dug-out concentration is mostly in Manitoba where water is used more particularly for stock watering and not so much for irrigation. There are some dams in Manitoba, but not so many. As you go west the dug-outs gradually decrease and the other larger projects increase until you get to the province of Alberta where tremendous areas are under the ditch—100,000 acres and even more than that in some cases.

*By Mr. MacNicol:*

Q. With regard to these small projects in Saskatchewan or Manitoba where dams have to be erected, does the P.F.R.A. send out qualified engineers first to ascertain whether there is sufficient foundation to erect the dam on? We have read from time to time about very substantial dams that have been erected at some expense to the country having gone out at the first freshet. That would not have happened if the foundation had been properly built on. And now, after ascertaining whether there is a sufficient foundation to build a dam upon are the dams inspected during the course of construction and are they pronounced O.K.?—A. First of all, there are all kinds of dams. There is the small individual project. Say I am a farmer with a project on my farm. I have been looking at a little draw on my land and I see that there is a lot of water running down that draw every spring. If I do a little damming I could conserve enough water to carry me over the summer months and maybe for the winter as well, so I make an application to the P.F.R.A. for a dug-out or a dam. As soon as we receive sufficient of those applications from an area we notify our inspector and he goes out and inspects the site and he will tell that farmer whether it is suitable or not. If there are not 30 acres of drainage he will not authorize a dug-out. We cannot spend money for dry holes. That would be one of the worst black eyes we could get. Nothing less than 30 acres of drainage will insure that it will fill with water. If it is a larger dam—say it is a community dam—the same procedure is followed as far as the application is concerned, but there is a record in the provincial water rights office about that project, and the individual has to apply for a water right, and as soon as he receives that right he can come to us and ask for financial assistance and then our man goes out and makes borings and that sort of thing, as in the former case. In the larger projects investigations are made during construction and after construction to see that the work is up to specifications, and if it is he gets his financial assistance and if it is not, he does not.

Q. In reference to those dams that went out because of a slight pressure, have they been inspected?—A. I can only speak for the P.F.R.A. dams, and our washouts have been so insignificant compared with the 20,000 projects we have built—as to be insignificant.

Q. That is right; there are not many. I know something about engineering and I know of the importance of the foundation to a dam and I was under the impression that many of the dams erected out there had two or three or five square miles of a watershed and that requires a substantial foundation for a

dam?—A. You are quite correct. I want to say this in justification of our engineers, because accidents may happen even with the best engineering, and we know what happened at Fort Pitt near Glasgow, Montana—they had the best engineers on the North American continent, a galaxy of good engineers, and they had a bad slide in their dam. There are certain factors which cannot be determined by engineering, but we do everything we can. We have a soils laboratory at the University of Saskatchewan. We get samples of the earth and we put those samples under a test, and our whole structure is designed on scientific information. It may require a year or more to investigate a site before we let contracts—before we even draw specifications for contracts. Particularly in the case of very large dams.

*By Mr. Ross (Calgary):*

Q. In the southeastern part of the province there is one dry area and it seems to me that there is comparatively little work done there as compared with work in Saskatchewan. Am I right in the first place? Is there a reason for it?—A. It depends upon what you are referring to. If you refer to a big water development I say, yes; the reason is that there is no demand for it; but if you refer to a small water development you are not right. The bulk of our applications, as you can see—here on the map, is one of the greatest concentration of small water development on the North American continent in the Red River drainage area in Manitoba.

Q. I am speaking of Alberta.—A. Oh, pardon me. The same thing obtains. Your small water development is concentrated on the east side of the province and there are not the same demands for small water development further west—it is ranching country mostly. In the western section the demand is for those larger schemes. Our policy has to be very flexible. If we had a hard and fast policy that applied only to one particular area it would not suit the other areas at all. We have such a tremendous area to cover, stretching across the three prairie provinces, and we have to have a very flexible policy to meet different conditions. In Manitoba there is more precipitation, more water. Yet in many districts they cannot get underground water (wells), therefore they need conservation of surface water in Manitoba too. Coming into Saskatchewan you get into more marginal variability. As you proceed west the land gets drier until you get to a region where we have to depend almost entirely on irrigation. Our policy is to take that into consideration. I think I explain this in my paper.

*By Mr. McNiven:*

Q. Mr. Spence, you spoke of orchards, what type of fruits are grown?—A. There is a remarkable thing about that. There is a great variety of fruits that we can grow on the prairies. Remember that we have a variable climate, but it so happens that some of that variety lends itself to certain things. I never thought a chinook wind was worth anything to anybody, but I was talking to Dr. Fairfield and he said this to me, "the mere fact that we are in the chinook belt enables us to grow things that they cannot grow farther north where they are not in the chinook belt." Sunshine has something to do with it. I know Mr. McNiven's point. At Brooks, Alberta, they can grow plums better than they can at Lethbridge and they can grow apples better at Lethbridge. At Morden, Manitoba, they can grow apples almost as well as in the Okanagan valley. Conditions at Morden are such that they lend themselves to fruit growing. Over a surprisingly vast area you can grow apples. You can grow large apples and ripen them at Saskatoon and up here at Elson and at Scott, and of course down in the south at Morden, Manitoba, hundreds of barrels

are grown every year—about 300 named varieties are grown at Morden, Manitoba. If it is possible for this committee to see some slides which I brought with me I will be able to show you pictures of that fruit on the screen.

*By Mr. MacNicol:*

Q. Mr. Spence, I am sorry but I shall have to leave at half-past twelve, and I should like to hear something about the possibility of water conservation at the source.

*By Mr. McNiven:*

Q. Would the growth of vegetables induce the establishment of cooperative canneries?—A. Absolutely. The proof of that is that where they are growing vegetables now they have canneries; Taber and Lethbridge are examples of canning centres.

Q. Would that practice spread through the provinces of Manitoba and Saskatchewan?—A. Yes, particularly in those larger irrigation projects, not in the small ones, but at Swift Current, in the Qu'Appelle valley, in the Souris valley and places like that. The Frenchman valley would lend itself to small canning factories.

Q. Even the dug-out has encouraged the growth of vegetables?—A. Yes, for individual use on the farm.

Q. And some for sale?—A. Yes, some for sale. This official bulletin here says there are some for sale, and a lot for sale sometimes.

Q. And that in turn would give employment?—A. Yes, this whole thing is tied up to industrial development. I try to make that point, you will see, as I deal with the large water development. You will see too how much one thing is tied up to another.

I come now to what we are pleased to call large water development projects. A branch of the water development is the large water development project.

The CHAIRMAN: You are going to deal now with large water development projects, are you?

The WITNESS: Yes.

These projects, as distinguished from individual, neighbour or community projects, consist of works too large to be financed by individuals, municipalities, or communities. The capital costs of these large projects are provided from funds voted by parliament for rehabilitation purposes.

The large projects consist of dams, reservoirs, canals, and other facilities used to store and distribute water for irrigation.

In the province of Manitoba, irrigation is not practised to any great extent, consequently, the large projects that have been constructed in that province are mostly used for stock-watering purposes. On the Souris river five large stock-watering dams have been constructed and necessary repairs were made to an existing dam on the same stream. Three stock-watering dams have also been built on the LaSalle river, together with five other large projects and seventeen community projects at other scattered locations. These projects are all located in the mixed farming and stock raising section of the province of Manitoba.

The March issue of a publication (*The Keystone*) issued by the Manitoba Department of Mines and Resources refers to the development of the Souris and LaSalle rivers as follows:

On the Souris river in southwestern Manitoba, where drought conditions had been particularly severe, six concrete regulating dams were constructed. These structures were so spaced as to transform a dry stream bed into an almost continuous lake nearly 80 miles in length. By the construction of three concrete dams on the LaSalle river, another river channel which had been dry throughout a large part of each summer, was transformed into a narrow winding lake some 40 miles in length.

These dams and reservoirs have a total storage capacity of 6,700 acre feet. The total cost of these projects to date, including right of way, is \$186,379.45.

I want to clear the mind of the committee on one point. I am only giving you typical examples. The report has been tabled in the house and all the detailed information is contained in that report. To-day I am picking out typical things, and I am using these large water projects in Manitoba as being typical of the work in Manitoba. Mr. MacNicol expressed a wish to be present when we discussed these large water projects, but I see he has to go out.

Mr. MacNICOL: I am quite sure Mr. Spence is not going to touch on what I want to know. I want to know whether the P.F.R.A. through its engineers has surveyed the source of the Saskatchewan river, the Belly river, the Oldman river, the Red Deer river, the Battle river and the north Saskatchewan river at the sources to see if there are places to store up hundreds of billions, maybe billions of billions of cubic feet of water. Perhaps that is beyond the purview of the department. I have been interested in what Mr. Spence has said, and I think he has given us a very fine presentation and I want to compliment him before I go. I am not interested in this little stuff but I am interested in the big stuff at the source.

The WITNESS: Yes. I am pleased to inform you that such work as you mention is going forward. All these studies you are interested in are being made. They are not completed yet because it involves an enormous amount of work, and you can appreciate the size of the north Saskatchewan project. You have expressed your opinion of it and you can appreciate the amount of engineering that is required for that project. I have tried to resolve that into individuals—how many engineers it will take to complete our studies. Studies are being made, data are being tabulated, detailed investigations in some cases are being made, but I will say this that none of the work is completed because that is going to take a lot of money and it is going to take years.

### *Irrigation in Alberta*

Irrigation has been practised in southern Alberta for over thirty-five years. To date a total of 608,800 acres of land in that province is served from existing works. The benefits from irrigation, both local and national, are well and authoritatively stated in the report of the St. Mary and Milk Rivers Water Development Committee. On page 14 of that report it says:

The primary purpose in providing irrigation is to increase production by eliminating the hazard of drought. The control of moisture through irrigation affords a high degree of stability in production which gives irrigation an important advantage over dry land farming. This advantage is fully demonstrated by the greater density of population adequately supported on irrigated as compared to dry land, by the thriving agricultural communities and the prosperous urban centres in the irrigated sections. Irrigation provides for a wide diversity of crops and for the growing and feeding of live stock. It provides opportunity for home building, for maintaining a higher standard of living, and for improved educational facilities and social advantages made possible by a greater density of population.

On page 53 it goes on to say:

The social and community advantages resulting from irrigation deserve special emphasis though these benefits can only be partly indicated statistically. These advantages were observed by the committee on all projects visited and a good example is found in the Lethbridge Northern Irrigation District. Here an area of some 360

square miles, equivalent to ten townships, has been transformed in less than two decades from sparsely settled prairie subject to periodical crop failures and soil drifting to a thriving community of farm homes, towns and villages. During this period the number of farm holdings increased from 300 to over 900 and the population, rural and urban, increased from 1,500 to 10,000. As a result educational facilities have been greatly improved by the establishment of modern consolidated schools; electrical power has become available; a gravelled highway has been constructed through the project; a branch railway line constructed since the district was erected provides shipping facilities; and a park established in connection with a storage reservoir on the project provides recreational facilities for the surrounding area.

Again on page 69 we find these words:

It is recognized by irrigation authorities and has been proven by the results of completed irrigation projects that, in general, successful operation of large projects is impossible if the entire cost of construction is charged against the irrigated lands. It is also recognized that benefits from irrigation spread widely through various services and functions for transportation, merchandizing, processing of farm products and in the manufacture of equipment and supplies utilized on the farm. These benefits accrue to (1) the farmer who lives on the land, (2) to local urban and community centres, to municipalities and the province, and (3) to the country at large in increased capital wealth and the maintenance of employment and business activity.

Under the authority of the P. F. R. A. financial assistance, in substantial amounts, has been given to existing irrigation districts in the province of Alberta.

This financial assistance has not only enabled these districts to give more adequate service to farmers now situated on irrigable lands in the districts but it has also enabled the districts to increase the area under irrigation so that more people could be rehabilitated on these lands. The following are examples of this form of assistance:

The Canada Land and Irrigation Company received the sum of \$80,000 for the construction of new structures and for repairs to existing structures—canals, headgates and other works. This assistance was given to insure a more dependable water supply for the district. It also provided for some extension of the area under the ditch, so that additional settlers, from crop failure districts, could be rehabilitated on irrigable lands.

Financial assistance was given to the Mountain View and Magrath irrigation districts up to a total of \$5,253.36 for the improvement of existing works and also for the construction of new works—canals and structures of one kind and another. This expenditure was made for the benefit of settlers already living in these irrigation districts.

Financial assistance was given to the Leavitt irrigation district up to a total of \$63,580.54 for the construction of a storage reservoir and main canals to irrigate 4,500 acres of new land, and also to provide a more adequate water supply for the Mountain View irrigation district.

Financial assistance was given to the eastern irrigation district up to a total of \$22,490 for the construction of two storage reservoirs. This expenditure enabled the district to extend the area under irrigation and at the same time provide for the rehabilitation of settlers from adjoining dry land areas. Under the terms of an agreement between the dominion government and the eastern irrigation district, an additional sum of \$46,837.78 was paid to the district for repairs to existing works and extension of canals to irrigate 25,000 acres

of new land in the Rolling Hills district. The agreement provided, among other things, that this area would be made available to the dominion for resettlement purposes. It is there where we got the land for a great many of our Saskatchewan settlers that we were moving from submarginal lands. That is the area, Rolling Hills. The settlers came from the submarginal lands that you see scattered around on the map. Up to date a total of 162 farm families have been successfully rehabilitated on this project. The majority of these settlers are farm families that had been moved by the P. F. R. A. from submarginal land in Saskatchewan. By this arrangement two purposes were served, in that, these families have been taken permanently off the relief rolls and are not only self-supporting again but they are even making important contributions on their own account to the war effort of the nation. The lands from which they have been vacated are being put to their best economic use, namely, as grazing areas or community pastures.

Shall I pause here before I deal with Saskatchewan?

The CHAIRMAN: It just depends. It is approaching 1 o'clock. I would suggest it might be better for Mr. Spence to finish the statement and leave our questions until to-morrow morning. Would you like him to throw open the meeting now for questions or do you want him to finish up with his statement?

Some Hon. MEMBERS: Finish the statement.

The WITNESS:

### *Large Irrigation Projects in Saskatchewan*

In Saskatchewan, the province hardest hit by the great drought of the '30's, irrigation is finding its rightful place in agricultural practices. This is particularly the case in the low rainfall areas of the province. True, there is only sufficient surface or run-off water to irrigate a very small area compared with the total in crop production. Fortunately, however, the situation is not without possibilities. I can explain it best by saying the climatic condition is one of marginal variability. There are years when there is ample moisture for crop production—even for bumper crops. Then, there is the occasional dry year when the crop has to depend largely on subsoil moisture stored in the soil from previous years. This subsoil moisture is never sufficient to produce a good crop, therefore, irrigation is needed to a limited extent.

The country is also subject, once in a while, to abnormally dry periods—periods when the moisture is below normal for several years in succession. On balance, therefore, we have a situation where irrigation is needed to a certain degree in certain localities. During very dry periods irrigation is the only insurance against partial or complete crop failure.

The policy of the P.F.R.A. is designed to meet this particular situation by the development of large irrigation projects on the rivers and streams, and also by development of small projects on individual farms. Under this policy every feasible means is taken, where topography and other conditions are favourable, of utilizing surface or run-off water for beneficial use.

Fortunately the rivers and streams bisect the country in a way that favours the low rainfall area. Fortunately, too, feasible sites for dams and reservoirs are found at strategic points where large areas of good land can be brought under the ditch.

On the Frenchman river at Eastend and Val Marie, works have been constructed to impound a total of 9,300 acre feet to irrigate 14,860 acres. The total cost of this development to date is \$525,441.53.

Cypress lake reservoir, with a capacity of approximately 80,000 acre feet, has been constructed between the head of the Frenchman river and Battle creek for the purpose of supplying water to the irrigable lands along the Frenchman river and Battle creek. The ultimate development of irrigation on these streams

is not definitely known yet, but depends on the amount of water which can be stored each year, and will be from 20,000 to 22,000 acres distributed along the two streams, of which 14,861 acres have already been developed. The total cost of the reservoir to date is \$427,317.35. This cost also includes the rights-of-way for reservoir and canals.

On Maple creek, Saskatchewan, reservoirs have been constructed to store 23,260 acre feet for the irrigation of 8,100 acres in the Maple creek district. The total cost of this project, including land purchased for settlement together with the preparation of the land for irrigation, amounts to \$318,173.84 as at the end of the fiscal year 1942.

On Swift Current creek and Rush lake creek, Saskatchewan, reservoirs have been constructed to impound 110,000 acre feet. This project when completed will irrigate approximately 20,000 acres of valley land between the city of Swift Current and the town of Morse on the main line of the C.P.R., and also 5,000 acres on Wiwa creek between Neidpath and Hodgeville on a branch line of the C.N.R. The cost of the works so far completed is approximately \$260,000.

*By Mr. Black:*

Q. What are the bright red sections on the map?—A. Water storage.

Q. Natural or artificial?—A. Artificial.

Mr. CASTLEDEN: That is a lake.

The WITNESS: I mean by artificial these reservoirs are being built up. Reservoirs and dams are two different things. A dam may create a reservoir, but these are natural reservoirs. You can build up storage in the reservoir by the construction of works and you can take the stored water out again for irrigation or other use.

*By Mr. McNiven:*

Q. That is Long lake.—A. Yes; we built works there to raise the level of the lake until it is so high we can irrigate from that lake, using it for a reservoir, the same is true of Buffalo Pound lake. We are building up that storage in Buffalo Pound lake to take water out to use down the Qu'Appelle valley, for irrigation.

Q. Long lake would be seventy miles long?

Mr. CASTLEDEN: One hundred.

The WITNESS: It is a very big one. We have not got anywhere near to high level yet, but this spring is doing something to it.

Projects are also under construction to create storage for the irrigation of between 20,000 and 30,000 acres of land in the Qu'Appelle valley. This development consists of dams and other control works at Buffalo Pound lake, Last Mountain lake, Round lake, Crooked lake, Lebret lake and flood control structures at other locations on the Qu'Appelle river. The total storage capacity of these reservoirs is estimated at 73,700 acre feet. The total cost up to the end of the fiscal year 1942 was \$145,618.24.

### *Conclusion*

These large projects in Saskatchewan are being developed entirely by the P.F.R.A. The main benefits can be grouped and summarized as rehabilitation measures which provide satisfactory locations for the resettlement of farm families who are being moved from submarginal lands. As already indicated, many families are being rehabilitated in this way. Also, water may be brought to individual farms, situated in a project, for the irrigation of 30 or 40 acres as an insurance measure against drought. The policy of developing extensive areas for irrigation also gives security to farmers living in proximity to the areas,

as it enables them to acquire allotments or units of irrigable lands which together with their dry land gives them a truly economic set-up. A farmer does not have to get his whole farm irrigated in Saskatchewan to live; even in the driest part of the province. If he gets ten or fifteen acres of irrigation he can be reasonably secure. I am not speaking from theory when I say I would sooner have a small project in one of those irrigation districts that I have mentioned with some dry land surrounding for pasture than some of the best wheat land on the Regina plains.

Mr. McNIVEN: You have one.

The WITNESS: Yes, I have one. That is where the rehabilitation features of our work comes in.

Altogether, these large irrigation projects, located as they are in strategic parts of the low rainfall area constitute a wonderful stabilizing factor during dry periods, as it is within these irrigable areas that dependable reserves of good feed and fodder are being built up to meet the emergency of dry years ahead and consequent crop failure in surrounding territory. Swift Current would stabilize the country for hundreds of miles or more around it.

All in all, the development of irrigation is an important part of the "land use" programme.

I come back now to where I began. Each activity ties into some other activity and makes a web or pattern in an over-all plan in the rehabilitation of agriculture on the prairies.

Undoubtedly all this will cost money—but so will relief, which is not a permanent solution for anything. On this point I quote again from the report of the St. Mary and Milk Rivers Water Development Committee. On page 65 it says:

During the severe drought years from 1931 to 1938 the relief expenditures in Alberta amounted to \$51,968,585 including relief works, direct relief administration, and medical aid. The total relief expenditures in Saskatchewan amounted to \$134,230,046 during this seven-year period, making a total of \$186,198,631 for the two provinces, not all due to drought, but the bulk of it.

Food, seed, feed, and fodder including freight were main items of expense. During the winter of 1937-38 some 488,000 tons of feed were supplied in the drought area of Saskatchewan and 44,000 tons in Alberta. Much greater quantities would have been required had not more than 474,000 cattle been removed from the drought area.

It is estimated that a total of 3,383,000 acres can be irrigated in the two provinces—Alberta and Saskatchewan. I was on the relief committee of the government at that time. We were getting hay from away down in Minnesota, we were also getting hay from the province of Quebec and west in the Fraser River valley of British Columbia, and the freight on these feeds came to more than the feed itself. Now, my point in connection with that is this. This development, when finally completed, will eliminate for all time the necessity of having to ship feed and fodder into Alberta and Saskatchewan from points outside of these provinces, even during the driest periods. That is where we are now. What of the future? In addition to the expansion of the cultural, the land utilization and the small water development programmes, large water development should also be included in a comprehensive plan or programme of development. The proposed programme, of large water development will fit into a long-time programme for the whole area. Mistakes have been made; but fortunately, the present development has not extended to a point where it is too late to revise the present system to conform with a comprehensive plan of total development. Nothing has been done so far in previous development that

seriously interferes with our future programme. That is the important part. Now instead of dealing with the thing piecemeal, stage by stage, or going too far in one direction and not far enough in another, the proposal I am going to submit to the committee for the future is an over-all plan which embraces roughly the expenditure of \$111,000,000, and which will irrigate, when completed, 3,000,000 acres of land in the three prairie provinces. That is a subject for another meeting.

*By Mr. Black:*

Q. What is your total expenditure on the individual projects by the government and on the community projects and on the larger projects, including irrigation?—A. Smaller projects about \$180,000. I have not got the figures for the larger one, but it is all in the report.

Q. Which report?—A. The Prairie Farm Rehabilitation report, which was tabled in the house about a month ago; all the detailed information is there.

*By Mr. Castleden:*

Q. Roughly \$37 per acre is the cost of irrigation?—A. On the average?

Q. It works out to that on the average?—A. I have not worked it out in figures.

Q. You said \$111,000,000 was the estimated expenditure?—A. Yes, for the programme I am going to submit; but there are a great many other things mixed up in it, power development—

*By Mr. Ross (Calgary East):*

Q. Are you familiar with the proposed irrigation scheme?—A. I will deal with that to-morrow, sir, the northern Saskatchewan scheme.

*By Mr. Graham:*

Q. May I ask this question? You mentioned the limitations that are placed on your programme because of the war.—A. Yes.

Q. And the lack of technical staff.—A. Yes.

Q. Man-power and materials.—A. Yes.

Q. I assume that since the work of this committee is of a preparatory nature with regard to reconstruction and re-establishment there would be considerable programmes that you could proceed with even during war years?—A. Oh, yes, undoubtedly.

Q. What you are really trying to do is make a better home and a more secure living for the millions of people living in that area that you have outlined on the map?—A. That is it in a nutshell; you have stated it perhaps better than I did.

Q. Mr. Chairman, though I am not on the committee and because I am not going to be here to-morrow, I should like to leave with the committee a suggestion that you consider if it would not be wise during the war to get the house ready for reconstruction and re-establishment based on Mr. Spence's programme. If Mr. Spence's programme is correct and it is in itself preparatory work to making the home a better one to come to, surely that work should be proceeded with during a war period, having in mind the limitations spoken of. I should like the committee to keep that in mind because I come from a district of course where this program is vital to reconstruction and re-establishment as a district.

The CHAIRMAN: The whole objectives of this committee are post-war, so that naturally what we have in mind is post-war work. Mr. Spence, you say you have a programme to place before us. I was wondering if we could have copies of your programme?

The WITNESS: No; unfortunately there is so much individual handwork in the brief it was impossible to reproduce it. I brought two copies. I can let you have one, but I must keep my original, I cannot let it out of my hands because

we could never make another one if we lost this one. It is our intention to make some copies, but because there is so much handwork, charts and things of that nature in it, it is impossible to make copies for everyone. I have here the information that Mr. MacNicol is asking for; that is, as far as it can be obtained at the present time.

The CHAIRMAN: Is there anything further before we adjourn?

Mr. McNIVEN: This has been a most interesting and informative presentation. We are indeed grateful to Mr. Spence for the great amount of information he has presented to us. I would suggest that we meet again to-morrow morning and if it is the wish of the committee to ask Mr. Spence to show his slides to which he made reference. The slides will show much of the work that has been done and much of the results obtained. I have seen these slides on different occasions, and I believe that the members of the committee would be very much interested in seeing them. I would suggest the slides be included as part of the work of the committee to-morrow morning.

Mr. GERSHAW: I would like to ask Mr. Spence if when he is submitting his report to-morrow he will be in a position to pick out the most feasible and the most necessary of the projects which will produce the greatest results in the way of providing homes so that this committee would have just when they need it some definite information and would have in mind a few projects which could be started almost immediately to absorb the unemployed we anticipate later. There are so many schemes; I know it all fits into one great whole, but there are individual schemes; some of them are very expensive and some of them are relatively not expensive; so I was wondering if Mr. Spence could prepare something along that line.

The WITNESS: Yes, I have prepared that. I have large water developments in four groups, giving the detailed information about each project. It is almost more detailed information than the committee will want to have. In addition to that there is the agricultural work and the land utilization work and the work which I dealt with previously.

Mr. BLACK: I am in sympathy with these special studies and consideration should be given to projects that are obviously going to make for settlement. I think the initial work should be done now, possibly the actual construction work should be delayed although some of it, no doubt, should be undertaken now; but my main proposal is that they should widen this inquiry to take in the rehabilitation or the reclamation of the marshlands in the maritime provinces. Dr. Archibald has given study to them over years in the province of Nova Scotia; the government of Nova Scotia is greatly interested and unquestionably some work should be done there, and something should be got under way as early as possible. These are the most fertile lands in Canada and they have reverted to floating bogs. The early French settlers claimed those lands and dyked them to protect them from the sea, but the dykes have broken down. The larger trench channels have filled up. In the old days the holders were able to do that work by hand labour, but it cannot be done like that any longer, and I would like to see this inquiry widened to take that into consideration.

The CHAIRMAN: That will be given consideration.

The committee adjourned to meet Thursday, April 8, at 11 o'clock a.m.









Gov. Doc.  
Can.  
Com.  
R

Canada  
24th March 1943

SESSION 1943

HOUSE OF COMMONS

CHIXC2

-4787

SPECIAL COMMITTEE

ON

RECONSTRUCTION AND RE-ESTABLISHMENT

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 8

THURSDAY, APRIL 8, 1943

WITNESSES:

Mr. George Spence, Director, Prairie Farm Rehabilitation, Regina.  
Dr. E. S. Archibald, Director, Dominion Experimental Farm, Ottawa.

OTTAWA  
EDMOND CLOUTIER  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1943





## MINUTES OF PROCEEDINGS

THURSDAY, April 8, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11.00 o'clock, a.m. Mr. J. G. Turgeon, the Chairman, presided.

The following members were present: Messrs: Bertrand (*Prescott*), Black (*Cumberland*), Brunelle, Castleden, Eudes, Ferron, Gillis, Hill, Jean, MacKenzie (*Neepawa*), Mackenzie (*Vancouver Centre*), MacNicol, McKinnon (*Kenora-Rainy River*), McNiven, Martin, Matthews, Nielsen (*Mrs.*), Quelch, Ross (*Calgary East*), Sanderson and Turgeon.—21.

In attendance were: Dr. E. S. Archibald, Director, Experimental Farm, Ottawa; Mr. J. D. Cameron, Special Representative, Canadian Pacific Railway.

Mr. George Spence, Director of Prairie Farm Rehabilitation was called and further examined.

Mr. Henderson, M.P., by leave of the Committee, examined the witness.

Mr. Donnelly, M.P., by leave of the Committee, examined the witness.

Mr. Hill, Mr. MacNicol and Mrs. Nielsen expressed appreciation of the practical evidence submitted by Mr. Spence.

Mrs. Nielsen brought up the question of Markets and suggested that witnesses be called to deal with this subject.

Mr. Gershaw, by leave, addressed the Committee.

Dr. Archibald was asked to reply to the question of the feasibility of growing coarse grains on irrigated lands.

Dr. Archibald filed a statement showing improved acreage in farms in Alberta, Manitoba and Saskatchewan as a result of the work of the Prairie Farm Rehabilitation. This is printed as Appendix A to this day's evidence.

Dr. Archibald also filed a copy of the Submission to the Royal Commission on Dominion-Provincial Relations by the Alberta Co-operative Sugar Beet Growers Association, which is printed as Appendix B to this day's evidence.

The witnesses retired.

The Chairman thanked Mr. Spence for the valuable evidence he submitted.

The Chairman announced that Mr. Spence would show lantern slides of Prairie Farm Rehabilitation Projects tomorrow night at 8.15 p.m., in Room 277, House of Commons.

On motion of Mr. MacNicol the Committee adjourned at 1.05 p.m., to meet again at the call of the Chair.

J. P. DOYLE,  
*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

April 8, 1943

The Special Committee on Reconstruction and Re-establishment met this day at 11 o'clock a.m. The Chairman, Mr. J. C. Turgeon, presided.

The CHAIRMAN: Gentlemen, Mr. George Spence, who gave us a very interesting story yesterday of what has been done under the Prairie Farm Rehabilitation Act, will now tell us what those who are administering that Act propose for the future. I shall now ask Mr. Spence to take the stand.

Mr. GEORGE SPENCE, Director of Prairie Farm Rehabilitation, *recalled*

The WITNESS: Mr. Chairman and hon. members: In introducing the subject of large water development permit me to repeat what I said yesterday—we can profit from the experience of the past and any mistakes that were made in the early days of water development can be largely corrected as present development has not extended to a point where it is too late to revise present systems to conform with a comprehensive plan of total development. In furtherance of this objective, and particularly because the provinces have charge of the administration of the water rights, each in their own province, consideration should be given to the advisability of setting up an interprovincial board or commission. The function of this board or commission would be to advise the governments concerned—dominion and provincial—in all matters having to do with water storage and stream control, both for power development and irrigation, all with a view to devising a comprehensive water development plan designed to make the best economic use of the available water supply in the three prairie provinces. This over-all plan, when finally approved by the governments concerned, could then be carried out in stages as the circumstances might warrant, or a method of construction similar to that which has been recommended for the development of the St. Mary and Milk rivers by the committee who studied that development.

The brief which I am submitting for the consideration of the committee on large water development was prepared by Mr. B. Russell, C.E., senior consulting engineer of the P.F.R.A. It is prepared from data compiled by the former reclamation branch of the Department of the Interior, supplemented by later investigations and studies of P.F.R.A. engineers, so it may be accepted as the most up-to-date and authoritative information available on the subject at the present time from an engineering standpoint.

I want it distinctly understood by the committee that before projects are recommended to the minister for immediate construction the administration must be satisfied as to the economic feasibility as well as the engineering feasibility of the projects. The economic feasibility of some of the larger projects mentioned in the brief, particularly the North Saskatchewan river project or the Wm. Pierce scheme, as it is commonly called, has not yet been finally determined by the P.F.R.A. This brief should, therefore, only be accepted on the basis of engineering feasibility. With these qualifications I have great pleasure in submitting the brief for the consideration of the committee.

The attached memorandum gives a brief description of forty-two water development projects within the P.F.R.A. boundaries and which it is suggested might be given consideration by the committee for post-war development.

There is a group of eight irrigation projects, costing approximately \$16,692,000, which can be constructed almost at once. These include the St. Mary

and Milk river development, already recommended to the committee, and the Swift Current irrigation project now under construction.

A second group of six irrigation projects, costing approximately \$1,422,000 is practically ready for construction. That is, surveys have been completed in more or less detail, but some additional information is still required. With adequate staff, these could be ready in the course of a year.

There is another group of twelve irrigation projects, costing approximately \$48,011,000, for which preliminary surveys have been made but which require to be investigated in greater detail. Sufficient information is now available to indicate that they are all quite feasible and desirable. These could all be made ready during the construction of the first sixteen projects or, say, during the first five years. This will make a total of \$66,125,000.

There is still another group of six irrigation projects which have not yet been surveyed but which, from reconnaissance, are known to be possible if desirable. The total cost of these has been estimated, by a comparison with other projects, to be something like \$15,290,000. No estimate can be made as to the time it would take to get these ready until they have been further investigated.

Altogether, then, the total estimated expenditure for irrigation projects is \$81,415,000. This expenditure would provide irrigation for about 2,234,000 acres which, in addition to the area now irrigated, would make a total of 3,000,000 acres.

There is another group of water development projects, including storage on the Bow, Red Deer, North Saskatchewan and Clearwater rivers for power and irrigation, and a number of other useful projects. These have been estimated at approximately \$29,893,000 making the grand total for all projects \$111,308,000.

Allowing 60 per cent for labour and 40 per cent for material, the distribution would be, labour \$66,785,000 and material \$44,523,000.

At the heads of the North Saskatchewan and Clearwater rivers there are sixteen reservoir sites with a combined capacity of 2,000,000 acre-feet and costing \$13,000,000. The first step in the development of the North Saskatchewan river for navigation and power, should be to construct such of these as are necessary to completely regulate the stream flow.

To carry out such a program as outlined above, would require an immense organization. Engineering usually costs from 5 to 10 per cent of the construction cost, which in this case would be approximately \$8,500,000. It is only necessary to divide this amount by the moderate salary and expenses for an engineer to get some idea of the organization required. However, some surveys have already been made by the Dominion Reclamation Service and P.F.R.A. engineers, which might be valued at \$500,000, leaving \$8,000,000 yet to be expended. This, spread over a period of say ten years, is \$800,000 per year and would require 1,040 men of which at least one-half would require to be technically trained.

A resolution adopted at the last meeting of the advisory committee in regard to the North Saskatchewan project, reads in part as follows: "That the P.F.R.A. make available to the three provinces all pertinent data regarding water requirement." For a clear understanding of the problem, it is necessary to know the layout of the river systems in the drought area. The North and South Saskatchewan rivers head in the mountains in Alberta. The Waterton, Belly, St. Mary, Oldman, Bow, Highwood and Red Deer rivers and tributaries are the head of the South Saskatchewan river and the North Saskatchewan and Clearwater rivers and tributaries are the head of the North Saskatchewan river. These streams all flow north. Another stream used for irrigation, the Milk river, is to the south of the continental divide, and flows south.

The North and South Saskatchewan rivers flow through the province of Saskatchewan, the latter to the south of the province and the former further north, but they come together above the Saskatchewan-Manitoba boundary and flow into Manitoba as one stream.

To irrigate lands in the North Saskatchewan project it is necessary to divert large quantities of water from the North Saskatchewan and Clearwater rivers and turn it into the Red Deer river or from one drainage basin to the other. This water, together with the other streams, will be used for the ultimate development of irrigation including some 500,000 acres in Saskatchewan.

That has been variously estimated, but I am giving you these figures.

For the full development of irrigation in Alberta and Saskatchewan, then, as far as we know it the problem is to determine the effect of the diversions on the stream flows at the provincial boundaries. There is not sufficient time to go into the details of such a study, but the result is to show that in years of average flow 64 per cent of the North Saskatchewan water and 86 per cent of the South Saskatchewan water will still flow into Saskatchewan, and 78 per cent of the combined flow will still flow into Manitoba. The effect of the diversions in the low water years would be greater, but even in the lowest year of record corresponding percentages would be, for the Alberta-Saskatchewan boundary 51 per cent and 91 per cent, and at the Saskatchewan-Manitoba boundary, 69 per cent. The release of storage for irrigation maintains the flow during the low years, and an increment in flow through Saskatchewan much more than offsets the irrigation requirements from the streams in that province. The result of the study should be to dispel any fear of seriously depleting the water supply.

It may be in the best interests of water development to point out here, the importance of stream flow measurements. Such measurements are the foundation of irrigation, drainage and water power engineering. Without it, works cannot be designed or water supplies estimated, and a lack of this information would almost surely be responsible for costly mistakes in any large scale plan of water development.

All these things are tremendously important but the public knows so little about them that it is sometimes difficult to get money for them.

Like most engineering work, this has been carried along efficiently and quietly by the Dominion Water and Power Bureau, with some assistance from the provinces. There may be a danger, however, unless its importance is realized, of such work being curtailed. To be of greatest value, long term records are necessary. Short term records are misleading and dangerous.

To be of value to any post-war programme, these records are required now, and a recommendation of this committee urging an extension of this important work, may serve a useful purpose.

The programme which I have submitted is confined to the P.F.R.A. area—

Mr. BLACK: Who establishes the areas of the P.F.R.A. area?

The WITNESS: That is going to take a long while to answer.

The CHAIRMAN: Would you mind allowing the witness to come to that later, Mr. Black?

The WITNESS: The program which I have submitted is confined to the P.F.R.A. area. We have knowledge, Mr. Chairman, of agricultural rehabilitation projects in your own province of British Columbia and, no doubt, other hon. members of this committee have knowledge of many other projects in other provinces of the dominion, many of which are doubtless feasible and highly desirable projects for the expansion and the betterment of the agricultural industry, projects which if included would add enormously to the programme of post-war reconstruction and rehabilitation. Perhaps I had better pause here and let the committee ask questions.

*By the Chairman:*

Q. Pause for questions?—A. Yes.

The CHAIRMAN: Now you may ask your question, Mr. Black, if you wish.

*By Mr. Black:*

Q. What authority establishes the boundary of the P.F.R.A. area?—A. The authority is in the Act itself.

Q. The boundaries?—A. No, not specifically in the Act. The Act, as I pointed out at the beginning of my remarks yesterday, expresses itself in very general terms, makes no effort to lay down policy, but what it did was to provide for the appointment of an advisory committee and all matters of boundary revision are discussed with this committee and the committee in its action has been tremendously limited by the title of the Act, Prairie Farm Rehabilitation Act. I think they feel now—I hope I am expressing their thought on it correctly—that probably the boundaries should be extended. They feel, however, that the boundaries have been extended as far as they can be extended as long as the title remains "Prairie Farm Rehabilitation." In the work they are doing now they have gone beyond the triangle which is roughly 63,000,000 acres and have taken in about 160,000,000 acres. What they are doing now is they are clipping off the edge of the park belt and almost getting into the bush section in the three prairie provinces. That does not say we have exhausted the field of our activities. Not by any means.

*By Mr. Quelch:*

Q. Are you going further into the question of the various modifications of the North Saskatchewan project?—A. I will try to answer your question.

Q. Are you getting any more information on that or is that as far as you have gone on the North Saskatchewan?—A. I am not sure that I altogether understand the question; I will repeat it and if I repeat it correctly I will try to answer it, if not you will straighten me out on it. The question, as I understand it, is have we investigated the modifications of the William Pearce scheme.

Q. Are you dealing with that now?—A. I will come right to it.

Q. This dam at Buffalo lake, just where would that dam be?—A. I can give you the location, I have it in my notes, but there is so much detail—

*By Hon. Mr. Mackenzie:*

Q. Where is it in Alberta?

Mr. QUELCH: West of Stettler.

The WITNESS: I have the township and range here, but it would take a little time to look it up; I do not think you want to know that; you want to know approximately where it is.

*By Mr. Hill:*

Q. Mr. Spence, you spoke about diverting water into Buffalo lake. You said it would have to be pumped in or something like that. Then you spoke of diverting it on into the next lake and then the Saskatchewan. You said that was higher. How do you get water in there, by pumping?—A. There are two proposals, one is to erect a diversion dam on the Red Deer river back where the river is higher and bring the water down a canal to Sullivan lake and when you get to Sullivan lake you command a tremendous amount of acreage. One scheme is really power development and the other is power development and irrigation. You cannot have the maximum in the two things. If you have power you have to let the water down again; but if you want to use the largest amount of land for irrigation you must keep the water up to the highest possible level. The economics of the situation may develop to a point where the power is more valuable than the irrigation.

Q. The power site would be at Buffalo lake, would it?—A. Yes.

*By Mrs. Nielsen:*

Q. Mr. Spence, you mentioned the fact that these larger projects, which would possibly cost somewhere in the neighbourhood of \$81 million, would be spread

over a period of ten years, roughly, and that a tremendous amount of water could be taken from that. Can you give us any idea as to the possible number of men who may be employed other than engineers, the ordinary men that would be used on the construction work? You see, our idea here is to find employment for returned men. Can you give us any idea of that?—A. That is a very difficult question to answer. You will remember in discussing small water development yesterday I made an attempt to reduce the money factor into labour hours. Permit a correction there. I was speaking of pasture development, because that is all hand labour, every bit of it practically, and we can get it from the pay sheets. But large water development, as you know, is done by big power machinery, so it is impossible to give you the labour hours in that connection. The work is done by contractors, mostly large contractors, and they use large machinery; but, of course, if you follow it back it takes men to make the machines on so on.

*By Mr. Martin:*

Q. Can you give us a rough estimate? You have given a figure of \$81 million; can you give us a rough estimate, taking into account those machines used in the most efficient way doing that work? Can you give us a rough estimate?—A. I cannot do it to-day, but I might be able to do it before the committee rises, but I would have to consult very carefully with my staff that is making a special study of it.

*By the Chairman:*

Q. You gave us a break-down of that before Mr. Martin came in in connection with the engineering part of the various projects.—A. I could do that.

*By Mr. Martin:*

Q. What I was thinking of specifically, following Mrs. Nielsen's question, is this, we here are concerned with post-war projects. We want to know how many men we can put to work there.—A. I think I can manage that for you, but I cannot have it for you while I am here in Ottawa; I will furnish it to the secretary.

*By Mr. McKinnon:*

Q. Did I understand Mr. Spence to say that the expenditure of \$81 million would irrigate 3,000,000 acres of land?—A. No, I will give you that information in detail when we start discussing this report; that has nothing to do with what I am talking about now.

*By Mr. Castleden:*

Q. In regard to what he said this morning we understand the different types of soil require different volumes of water and drought areas will require more in lean years. What assurance will there be that there will be a sufficient amount to meet all the irrigation needs that were outlined this morning? Do your present surveys show there will be?—A. Yes, because we do not take any more land than we have water for; it is based on the water supply. There is no limit to the amount of land, no limit at all; the limit is the water supply and we do not undertake any more land development than we have water for.

Q. Even in so far as lean years are concerned?—A. Correct.

Q. When the supply is very low?—A. That is taken into account; but you must remember the storage is a factor there. The low year is supplemented; the stream flow is supplemented in the low year from storage.

*By Mr. Quelch:*

Q. Mr. Spence, regarding employment, it is true is it not that not only will these projects create a great deal of employment during the period of their construction, but as a result of that construction there will be a greatly increased

amount of employment through such things as irrigation and power development, industries besides?—A. That is the point; it is not so much the employment during the construction period although that would be a very considerable factor, but after these projects are developed and go into production then the secondary industries, this and that and the other, will be tremendous. I gave you some statistics yesterday in connection with the situation in the irrigated areas in Alberta to show what happened.

*By Mr. Hill:*

Q. Mr. Spence, you spoke about reducing the flow of the Manitoba and that there might be some objection from the Manitoba people. Is it not a fact if you create large storage basins at the heads of these rivers you maintain a more uniform flow in the summer, but even with the reduced flow going into the Manitoba they will really get more water during the summer months than in the big run-off in the spring, and therefore you may offset to some extent the water that you take because you provide a more uniform flow?—A. Yes, to the extent that you can spread the water.

Q. That is what I meant. I brought that up from this point, some Manitoba people may get that idea, but if they actually knew that they were going to get more uniform flow it would do away with that objection.—A. The committee which I have suggested would overcome that difficulty.

*By Mrs. Nielsen:*

Q. What possibility would there be of getting, perhaps through a change of the name of the bill which governs these projects, an extension particularly into the north, because, as you well know, that northern Saskatchewan river is not by any means the largest we have. We have several miles further north the Beaver with a large flow of water. We have during this last decade large numbers of families who have moved up into the northern area from the dried-out areas. So far these people have been dependent upon agriculture exclusively. I am wondering if it would be possible by utilizing the waters of the Beaver river to induce secondary industries to become established to make it possible for these people to live up there. It seems to me a terrible thing, since that part of the country is occupied, if your department is doing nothing in regard to the waters up in that area. Is anything being done to extend your activities farther north to improve the plight of our people?—A. Is not the question the honourable member has asked a question for this committee? Should not this committee keep that question in mind in making their recommendations to parliament.

MR. HILL: I would suggest the Act might be changed to read "Canadian Farm Rehabilitation Act", and include all provinces.

*By Hon. Mr. Mackenzie:*

Q. Does that hurt your feelings?—A. No; it does not hurt mine.

The CHAIRMAN: It does not hurt mine.

*By Mr. Ross:*

Q. We are dealing with post-war reconstruction. You made a suggestion that certain things should be done now before the war is over. I should like to enlarge a little on that. Take, for instance, the Meek report dealing with irrigation from the St. Mary's and Milk rivers. That report recommends that the scheme which they had in mind would cost \$15 millions, \$8 millions of that would be provided by the provinces and \$7 millions by the dominion. There would have to be certain adjustments made between the provinces and the dominion before the work could be undertaken, before anything could be done. I take it you probably recommend very strongly that the dominion and the provinces should get together at once and agree upon the distribution or agree on how this project should be carried out and which part should bear their share by reason of the provisions of the report. Would you go any further? You would recommend that at the present time?—A. Yes.

Q. Would you go any further than at the present time; would you do any preliminary surveying? A number of preliminary surveys have been made, according to the report, but there are further surveys that should be made. Would you go ahead with the surveys at the present time? You would, of course, first have to get an agreement with the provinces. If that is obtained, I suppose it would take six months, after that is obtained would you then go ahead without delay with further surveys and further work or what would you recommend at the present time?—A. I agree with your thought that this is a matter entirely of agreement; that agreements have to be consummated with the provinces and the committee that I have suggested may be a useful vehicle for helping to consummate those agreements as well as making the studies of the developments that should take place and the priorities and so on. But the investigations which could be conducted in the meantime would be dependent entirely on whether or not the P.F.R.A. can get technical men. We have to have first-class engineers for that work and as I say, it is very difficult to get or keep first-class engineers at the present time because there is so much demand for engineers for war work. If I may put it this way, engineering is a bottleneck in so far as investigational work for water development is concerned at the present time.

Mr. MacNICOL: Mr. Chairman, so far this morning I have been quiet, but I should like to say a word or two now with reference to what Mr. Spence has been saying. When I spoke of the Saskatchewan river economy I had not known that the P.F.R.A. had under its control the vast amount of work that Mr. Spence has outlined. I am very glad to hear that it has done the work which it has. For my own information I ascertained the situation in the western provinces and I then proceeded to Kentucky and Tennessee where I knew that works had been constructed and after making a thorough survey of the full length of the Tennessee river, some 800 miles or more, I made a speech in the House of Commons on February 10. From what Mr. Spence has said this morning I am more convinced than ever that it is an absolute necessity to forthwith or at the earliest date the government decides possible to set up a board like the T.V.A., or a board like you have been suggesting, and if the P.F.R.A. have not got the power, the power should be given to the P.F.R.A. to place the whole water economy of the Saskatchewan river basin under control, because I perceive from what you have been saying this morning it is not under one control and the fact is the whole economy of the basin is in grave danger until it is placed under one control. You said something about diverting the North Saskatchewan river water towards Buffalo lake and so forth. Well, I think the federal government will have to study it very, very carefully, especially with regard to navigation on the North Saskatchewan river, before anything is undertaken. Certainly, if the water is diverted west of Edmonton as well as East Edmonton, it would interfere with any navigation west of Edmonton. Of course, part of it will be turned back into the basin east of Edmonton and probably navigation will not be so much affected. Mr. Chairman, you have been searching very diligently and rightfully for recommendations to the government. In my judgment the first recommendation should be this, that the water economy of the whole Saskatchewan basin be placed under one board, under P.F.R.A., with engineers composed of the federal government and each of the western provinces. I do not see how you can continue with irrigation work until you set up a board, or you will affect the river when you start diverting water out of it. As the situation now stands if Alberta took the full amount it is allowed to take off but which it doesn't, it could take up to 5,000 cubic feet per second. It does not do it up to now, but it has the right to do it. If it does that it would substantially affect the whole river right up to its mouth to the extent of 5,000 cubic feet per second unless the reservoirs are first planned and constructed. So in my judgment

that is the second thing for us to recommend, after the board has been set up, that the reservoirs be planned and constructed. If you do not construct the reservoirs you do not conserve the flow of this river, and this river is not like other rivers we have heard about. Somebody spoke about spring freshets on the Saskatchewan. Saskatchewan freshets start about the end of May and reach their height some time in July or August when the flow rises as high as 10,000 to 100,000 cubic feet per second.

That is the time when the river can best afford to give up water for irrigation and it is the growing season. It seems to me that God made the river for that purpose. It has a high flow in the growing season so that the water could be diverted for irrigation without much loss to the river, because down in the Manitoba end of the river the water is too high at that time of the year and they are flooded out. So any water on the land for irrigation purposes would be well used without obstruction to Manitoba. The river is low in February and in January; it gets down at Flying Post to less than 4,000 cubic feet per second. I want to say emphatically that our first duty is to recommend that the whole water economy of the Saskatchewan river be placed under one board. The cost of \$81,000,000 does not mean very much. I would be willing to support anything up to \$150,000,000 to obtain what the P.F.R.A. has as an objective. Now, Mr. Spence referred to the sixteen reservoirs and stated that the water capacity would be 2,000,000 acre feet. Each acre has 43,560 feet so that 2,000,000 acre feet would be 87,120,000,000 cubic feet. That is not a very large storage. Lots of dams have far more than that on the Tennessee river. The dam proposed at Riverhurst would have a storage of 250,000,000,000 cubic feet. So in giving your figures you do not include the possible storage basins on the South and North Saskatchewan themselves; your figures must only have included the reservoirs at the headwaters. You could add to your 2,000,000 acre feet many more million acre feet on the main rivers themselves, and as I said a moment ago, the Riverhurst dam alone would store water for a 100 miles upriver and a mile wide, 250,000,000,000 cubic feet of water, estimating water at 100 feet deep with a dam 200 feet high. I am correct, of course, that your reference to reservoirs did not include the river itself?

The WITNESS: Just the headwaters reservoirs. I am not prepared to say we have investigated all these sites; there may be other sites.

Mr. MacNICOL: They are very important.

The CHAIRMAN: Are there any further questions to be asked of Mr. Spence before he continues?

Mr. HENDERSON: If I might ask a question with the consent of the committee, I have been waiting for some of the members to touch on the matter of natural resources of all the provinces and I wonder whether Mr. Spence will touch on Manitoba and the complaint about taking too much of the water from Alberta and Saskatchewan. If that problem arose it might probably make considerable difference to us. Now, I wonder how much trouble it would be to make arrangements with regard to the resources of these rivers so far as irrigating Saskatchewan is concerned?

The WITNESS: We have a much more difficult problem than that which is being dealt with now by the International Joint Commission, and it seems to me there is no insuperable difficulty. If there was a board or a body set up composed of representatives from the three prairie provinces and one from the dominion and they had all common objectives, as I have already stated, of utilizing to the full the water resources of the three prairie provinces, it does seem to me, Mr. Chairman, that a body so constituted could surely come to commonsense and proper decisions.

Mr. MACNICOL: In relation to the reservoirs at the sources of all the source rivers, I would like to hear if you have made any studies or if the P.F.R.A. has made any studies with respect to damming the South Saskatchewan at Riverhurst. I have discussed this with many engineers, including the government engineers here, and they do not all seem to be unanimous that a dam can or cannot be built there. I do not know; but an investigation should be made if a dam can be erected there, and then the province of Saskatchewan which is entitled to a lot of water could obtain from such a dam all the water required to irrigate the land from Riverhurst as far as Moose Jaw and provide lots of water for Moose Jaw and all the intervening municipalities without any material effect on the Saskatchewan river itself, because the dam itself would conserve 250,000,000,000 cubic feet of water, and at 10 pounds per cubic foot that means a very large number of tons. The reservoir could be filled up when the river itself would be running 30,000 or 40,000 or 50,000 cubic feet per second during flow time in the summer time. I am not in accord with pumping water out of the river; I am in favour of taking water in tunnels through the height of land which I am told is only eight miles wide. I went to Chicago myself, to investigate. The federal government tunnel under Chicago, which is 25 feet in diameter and I believe 25 miles more or less long through which they take the Chicago sewage right under the city for twenty-five miles and deposit it into the des Plaines river. A tunnel through the height of land at Riverhurst would be a bagatelle in comparison with what they did in Chicago under most difficult conditions, running it 110 feet more or less under the ground. I hope the P.F.R.A. will not be stopped doing things in an engineering way because of costs or capital investments.

The WITNESS: I am glad this point has come up because a dam at Riverhurst or some other point on the South Saskatchewan river in Saskatchewan has been talked about by the public and also by engineers ever since I can remember, thirty years or more, but I am not prepared to say to-day from the engineering information at my disposal that there is a site anywhere on the South Saskatchewan river where a dam of the size and capacity that would irrigate approximately 500,000 acres can be constructed. We are investigating sites now—the P.F.R.A. are investigating sites now that are promising, to say the least. The most important thing in the construction of large works for the impounding of water is the foundation; you simply have got to have foundations; and it so happens that the South Saskatchewan river is not particularly noted for good foundation conditions; but that can only be determined by engineering, by the taking of soundings in the river itself and making borings on the banks of the river and so forth and so on. I do not think I care to go any further, Mr. Chairman, than to repeat that we are investigating sites now that have a great deal of promise, but the dam, if and when finally located, may not be at Riverhurst.

Mr. HILL: The amount of money you spoke about in connection with engineering would include boring?

The WITNESS: Yes, everything.

Mr. HILL: I realized that from the size of the amount.

The WITNESS: It includes everything.

The CHAIRMAN: Are there any further questions to be asked of Mr. Spence at this stage? If not, he can go on to other points.

Mr. CASTLEDEN: With the plans for irrigation that you have at the present time, approximately what percentage of the land in Saskatchewan could be served by irrigation?

The WITNESS: That will depend on the plan finally settled upon. If the plan that we hope for may prove to be economical it would represent an irriga-

tion of approximately 400,000 acres in the province of Alberta and 900,000 acres in the province of Saskatchewan, or going east as far as the city of Saskatoon.

Mr. MacNICOL: That would be watered by how many cubic feet per second from the North Saskatchewan river?

The WITNESS: That would be supplied by reservoirs in the mountains and development principally of the waters of the North Saskatchewan, the Clearwater and the Red Deer rivers, starting at Buffalo lake and at Sullivan lake distributing the water in the way I have indicated on the map.

Mr. MacNICOL: How many cubic feet per second?

The WITNESS: I cannot give you the cubic feet. I have the acre feet, and I have the costs and everything in this detailed study. I have it all here in detail, in acre feet.

*By Mr. Castleden:*

Q. This irrigated acreage that is under prospect is what percentage of the total acreage in that area?—A. I have not that figure.

Q. I would like to get a broad picture as to what it means to the percentage of acreage in Saskatchewan and Alberta.—A. I have not got that figure. I can get it for you.

The CHAIRMAN: We can get that.

*By Mr. Castleden:*

Q. What is the total arable acreage under your scheme as it is to-day? —A. For the three prairie provinces, 3,300,000 acres.

*By Mr. Donnelly:*

Q. What percentage will be in Saskatchewan?—A. I had better not make an estimate because I have not the figure here. I can get it for you.

Q. We have under cultivation in Saskatchewan 7,500 acres?—A. Yes, a small percentage of the total.

*By Mr. Castleden:*

Q. And what is the total arable acreage covered by the whole scheme? —A. The total of the arable area?

Q. The total arable area that you have under this scheme?—A. I do not know what that is.

Q. How much of that land is arable?—A. I do not have that figure; it can be obtained but it will take a little time to get it.

The CHAIRMAN: About 72,000,000 acres of land under cultivation, Dr. Archibald says.

Mr. CASTLEDEN: This would cover about 3,000,000 acres?

The WITNESS: I do not want to make a guess.

The CHAIRMAN: I would like to emphasize this, that we should not press the witness for anything except solid facts.

Mr. CASTLEDEN: That is right. This is roughly about 5 per cent.

*By Mr. Matthews:*

Q. Would you care to discuss any plans you may have in regard to the waters in Manitoba?—A. Yes, I have that in detail here. What I propose to do, Mr. Chairman, is to go over our proposed program and to direct attention to each item and then the point was raised by Dr. Gershaw yesterday and I shall deal with that, and then if any particular member is interested in any particular development and asks for information I will give the specific information on that particular matter; but if no member asks a question we will just pass over the time, because if we stopped at them all we would be here for a week.

The CHAIRMAN: I do not know how much longer we wish Mr. Spence to be here in terms of days. I am anxious to hear, and I know that every member of the committee is, just what is the program planned by the P.F.R.A., and we want to know the area under which they are authorized to work; and while I do not wish to stop questions at all, too much questioning may cause the day to pass before we get on the record a true picture of what the plans are. I do not object to the questioning if we are going to have Mr. Spence with us another day, but I do think that the committee would like to have complete on its record what are the plans of the P.F.R.A. so that we will have a picture of the future, because we are dealing with the future.

Mr. MacNICOL: Mr. Spence is doing a very fine job.

The WITNESS: The attached memorandum gives a brief description of the forty-two water development projects within the P.F.R.A. boundaries which is suggested might be given consideration by the committee for post-war development.

Except in the case of project No. 42, the proposed Fort a la Coine water-power development, the name, location, and purpose of the respective projects is given as well as estimates of storage capacity, irrigable areas, and cost. Project No. 42 is outside the P.F.R.A. boundaries and is better known to officials of the Saskatchewan provincial government.

If we want specific information on that one we would have to go beyond the P.F.R.A.; it is outside of our area.

Nine of the projects listed herein have been fully investigated and could be constructed almost at once. In the case of nine others, surveys, plans and estimates are complete but some further information such as soil surveys, test borings, land surveys, etc., would be required before construction would be undertaken. There are seventeen additional projects for which most of the preliminary investigations have been made and for which preliminary plans and estimates are available, and seven other projects for which information is as yet available only from reconnaissance. The projects outlined then should be considered in groups as follows: The Ætna Irrigation District estimated 10,000 acres, estimated cost \$300,000 and estimated acre feet storage is 4,500 acre feet. That is a post-war project to rehabilitate a lot of new lands for the rehabilitation of returned soldiers and others.

The next one is Canada Land and Irrigation Company, estimated irrigation 15,000 acres, estimated cost \$403,000. New land can be developed and there is also the improvement and extension of irrigation to other lands in the project. The cost will be roughly \$403,000. This will be a post-war project because it will open up an enormous tract of new land for settlement.

*By Mr. Donnelly:*

Q. In this particular project that you refer to, when you refer to money, does that mean putting water over on the land or levelling the land and getting it ready to seed, or what do you mean?—A. No, the ones I am dealing with now mean only the construction of works for the storage of water, works for the distribution of water and other structures. When we come to the projects that have to do with land purchase, that is being exclusively developed for the P.F.R.A., I will indicate to the committee what these projects are if we get to them.

The next one is the Canada Land and Irrigation Company. That is the one that Mr. Gershaw referred to. It is situated northwest of Medicine Hat. The proposed Macleod irrigation district; proposed Enchant irrigation district; proposed Ross Creek—a small project east of Medicine Hat; proposed Notukeu Creek Vanguard district in Saskatchewan; proposed Swift Current irrigation district; I will go into details on the large ones: Swift Current, 25,000 irrigable acres, estimated cost \$1,300,000. It is post-war because it will open up new lands,

and the total storage capacity is 95,000 acre feet. Old Man river storage development, estimated cost \$612,322; estimated storage, 90,000 acre feet. Pine Coulee Willow storage development, 30,000 acres of land, \$140,000, 26,000 acre feet storage. These are all post-war projects in that they are opening up new land for settlement.

*By Mr. MacNicol:*

Q. 26,000 acre feet?—A. Sage Creek water development, 3,600 irrigable acres, \$50,000, 4,500 acre feet; Avonlea Rouleau irrigation project, 4,400 acres, \$200,000, 7,000 acre feet; Bear Creek storage development, 10,000 irrigable acres, \$300,000, 9,900 acre feet. This project is post-war, as it will open new land under irrigation for settlement, 9,900 acre feet; proposed Prince Albert dam, estimated cost \$400,000. That is purely a stream control dam and has nothing to do with irrigation. That is the one I referred to as being a provincial matter. Souris river water development in Manitoba, 3,000 acres of irrigable land available for water, cost \$120,000, the storage 4,000 acre feet; Wascana Creek water development, no irrigable land in connection with it, it is more drainage than irrigation.

Q. May I interrupt you to help to keep the record straight so that the members of the committee can figure out the number of cubic feet of water that will be stored in these reservoirs. When you use the expression so many thousand acre feet you might tell the committee that it means so many cubic feet of water.—A. The only trouble, you see, with using the term “cubic feet of water” is when you use the words “acre feet” you are talking about irrigation, because it is the number of acres you can irrigate. An acre foot is one foot deep of water covering an acre of land.

Q. Twelve inches?—A. Yes, 12 inches.

Q. Does your survey not advocate a foot and a half of water?—A. Well, that depends on the water duty; this is what that is called, water duty. Water duty is being reduced. I think a foot is probably right. I think it started out about two feet or something, away back in the early days, and it was reduced to 18 inches, now that has been reduced again. It depends on conditions, twelve inches duty or less may be adequate under certain conditions, but more may be necessary under very dry conditions.

I have dealt now with two stages of development. I will just pause long enough to give the members a chance to ask questions in connection with it.

Q. These are all small projects?—A. Reasonably small; I am just looking them over, one for \$300,000 and there is one here for \$612,322, 90,000 acre feet. I shall now continue with group 3; Atlee gas well was put down as an experimental proposition to demonstrate whether or not power could be developed cheaply and economically for the irrigation of land in the Red Deer river. We found gas at 1,200 feet—that would be all used for pump irrigation. There is an area of 20,000 acres in the valley which could be irrigated in that way at a cost of \$100,000. Alberta special areas—these are only small projects of 5,000 acres scattered all over here and there and elsewhere. The cost is \$200,000 and the acre feet 10,000; Bow river storage development, part of which is being developed now by a private company. That would be merely designed to increase the water supply to existing irrigation districts from the Bow river. This is a very useful project and incidentally a post-war project because it will rehabilitate new lands and make them available for settlement projects. The estimated cost is \$5,000,000, and the storage capacity of the reservoirs, as indicated on the map, which may be developed, is 350,000 acre feet. I can give you the detailed particulars of any one of these if you wish them.

The CHAIRMAN: Perhaps you could go ahead with your statement and the questions will come later.

The WITNESS: Crow's Nest Pass water development, there is a 35,000 estimated irrigable area there, at a cost of \$1,553,000, and 17,000 acre feet

storage; Highwood river irrigation development, 50,000 acres, cost \$1,372,000, water storage 55,000 acre feet; North Saskatchewan river development project, estimated cost \$23,937,838, estimated acre feet 2,553,226; North Saskatchewan irrigation project, estimated irrigable acres 900,000, estimated cost \$39,375,000, estimated acre feet 1,860,000. I think in view of the interest Mr. MacNicol has taken in the project I should read the description of that project to the committee.

*Location.*—Between the Red Deer and Battle rivers from Hanna in Alberta to Saskatoon in Saskatchewan.

*Purpose.*—To irrigate approximately 900,000 acres in the above area.

*General.*—This is a proposal originally made by the late William Pearce of Calgary to utilize the flow of the North Saskatchewan, Clearwater and Red Deer rivers, not for irrigation in the sense that lands are irrigated in the present projects in Alberta but rather to distribute the available water supply by natural and artificial channels where necessary throughout a very extensive area north of the Red Deer river in Alberta and Saskatchewan primarily for the development of the live stock industry.

The main obstacles to the development as visualized by Mr. Pearce was the fact that Buffalo lake, the main reservoir proposed, was too low to command all but a small portion of the area which it was intended to serve. It was determined, therefore, that if the diversions could be made to Sullivan lake instead of Buffalo lake, not only could more water be stored than in Buffalo lake but storage water could be made available to extensive areas much above the elevation of Buffalo lake. From surveys made of the Sullivan lake alternative it was estimated that the cost to irrigate approximately 1,411,000 acres would be approximately \$105,600,-000, or at the rate of \$74.89 per acre.

While the effect of the high estimated cost of construction was to temporarily kill the project it was always felt that the estimates made did not do justice to the proposal in that only one of the many existing possibilities was examined and that further investigations should be made of the following:

Combination of the William Pearce scheme and the North Saskatchewan project substituting Buffalo lake for head water storage proposed and also substituting the gravity diversion from the Red Deer river by pumping plants, power to be created by the construction of the Buffalo lake storage dam. This and other alternatives have been investigated in recent years by P.F.R.A. engineers and the following conclusions arrived at:

1. It is feasible to utilize large quantities of water from the North Saskatchewan, Clearwater and Red Deer rivers by gravity diversion or by pumps and irrigate approximately 900,000 acres in Alberta and Saskatchewan.

The amount of \$39,375,000, the estimated cost of the gravity diversion, while high is not excessive and is in line with present day construction costs for irrigation.

2. While the amount of \$50,400,000 for the pumping alternative appears excessive there are other benefits in the case of the pumping scheme which cannot be estimated in dollars and cents which tend to offset this excessive cost and it would be a mistake to make a comparison of the alternatives wholly on the basis of construction costs.

3. In the case of the pumping scheme not only would it be possible to create the facilities to irrigate a large additional area along the Bow river as a result of an exchange of power between the Bow and Red Deer rivers, but the release of water to the Red Deer river and thence to the South Saskatchewan river during the winter would create the

conditions to generate sufficient power in Saskatchewan to supply the total power load in the province for many years to come.

While general plans have been made and general conclusions arrived at, very extensive and detailed surveys will be required before any construction could be undertaken.

If undertaken, this would be one of the largest projects on the North American continent and would compare with the Columbia basin project in the United States.

*By Mr. Ross:*

Q. Does that lend itself to power development as well?—A. Yes; that is what we are talking about now, power development and irrigation.

Q. As well as irrigation?—A. Yes, the two; but obviously if you take all the water for power you detract tremendously from your ability to irrigate land because you have taken the water down again; it is only by maintaining the water at high level that you can use it to the greatest extent for irrigation.

Q. That is correct.—A. I go on—

*By Mr. MacNicol:*

Q. How much does it say that the estimated irrigable land is?—A. 900,000 irrigable acres. I do not think this committee should take these figures too closely to heart, Mr. Chairman, because we have not yet determined these things and we cannot determine them until a tremendous amount of more investigation has been made, but roughly these are the figures.

*By Mr. Quelch:*

Q. There are two modifications there, one to irrigate half a million acres at a cost per acre of \$55; that would be a power project?—A. Yes.

Q. And then there is the Sullivan lake scheme which would not utilize Buffalo lake at all; it would cost only \$15 million and irrigate 427,000 acres?—A. Yes.

Q. I mention that to show that there are two modified schemes.

The CHAIRMAN: Each one separate?

Mr. QUELCH: They are all modifications of the William Pearce project.

*By Mr. Quelch:*

Q. Would you say that the soil problem would give you any great trouble?—A. That is determined by the soils branch. I consulted Dr. Mitchell about that this year. Dr. Mitchell is the soils man in the University of Saskatchewan. We work very closely in this irrigation work with the University of Saskatchewan. Every irrigation project we have undertaken to develop we have had a man from the soils branch of the University of Saskatchewan to make a soil test on the alkali and other acids in the soil. If his report is unfavourable we make no recommendation at all. I submitted this to Dr. Mitchell and he said so far as any of these areas are concerned there was no soil problem in connection with it.

*By Mr. MacNicol:*

Q. I should like some time or other a report from you or your board forgetting all about diversion from the North Saskatchewan river for irrigation purposes. I presume once you start diverting water the city of Edmonton, and Battleford and every other municipality will protest because the diversion of water from the North Saskatchewan west of Edmonton will have a detrimental influence on possible navigation east of—A. You have in mind, Mr. MacNicol, navigation.

Q. Navigation.—A. Do you not think that would be a matter for this board to check to see if it is practical and feasible, and if navigation would be more important than irrigation. Would not the problem of navigation, irrigation and power be a proper question for the board to decide?

Q. Yes, but I am thinking of the whole economy of Saskatchewan.

*By Mr. Quelch:*

Q. The Sullivan lake project would only utilize Clearwater and Red Deer and would not utilize the Saskatchewan at all.—A. I will read the next section. Retlaw-Lomond irrigation, Redcliff Ronalane irrigation projects, 250,000 irrigable acres, cost \$3,500,000, 10,000 acre feet storage.

*By Mr. Gershaw:*

Q. Have you records of the surveying of that district? Have you everything like that? That has been done, has it not?—A. Yes.

Q. And it would be a storage proposition—a storage reservoir would need to be put in?—A. Improvement of existing works and storage.

Q. And the cost of that would be relatively less per acre than for most of the schemes, would it not?—A. I am sorry I have not worked it out on an acre basis.

Q. Of course, so much work has already been done there by private capital. That is along the main canal of artificial lakes, and also a great many of the collaterals have been put in. So many millions of dollars of British money have been put in there that it could be put in at a very low cost, according to information we have?—A. I think that is a correct statement.

*By Mr. Ross (Calgary):*

Q. It could be put in at less cost than the St. Mary or the Milk river proposition?—A. We have worked that out on an acre basis. I do not care to guess at anything, but I would say, yes.

Q. About one-third of the cost?—A. I would say it would be cheaper. There has been quite a complete investigation on the Canada Land and Irrigation Company's works by one of our engineers, Mr. Marshall, but there may be other factors when we start in more particularly when the works take in a much greater acreage under irrigation that would involve other things, and I do not think Mr. Marshall was detailed to make the full investigation.

The next is the St. Mary-Milk River Project No. 20. A copy of the report has been in the committee room since we began and it has also been tabled in the house. It calls for an expenditure of \$13,749,134 just for the works reservoir and main canals, there is nothing about the land except rights-of-way for reservoir and canals. This would irrigate 345,000 acres of new land in addition to the rehabilitation or a greater water supply for 125,000 acres now under irrigation. The estimated storage in the project is 738,700. Do you want me to read it all?

The CHAIRMAN: I do not think we should read into the record anything that we already have in another form.

The WITNESS: The next item is the South Saskatchewan River Pump and Irrigation scheme: 10,000 irrigable acres in the valley of the South Saskatchewan river at an estimated cost of \$10,000. Of course, you are pumping the water up out of the river so there is no acre feet storage in connection with it. I might add that it is quite economical to pump water for irrigation. There is something like, I think, 1,000 acres being irrigated in the Brooks district from one pump but, of course, much depends upon the source of power; you must have cheap power. The development of the North Saskatchewan River project which we have been talking about here would give us cheap power. There is also the other project we are investigating on the South Saskatchewan which might also give us cheap power right in the heart of the province; cheap power would make this project very feasible.

*By Mr. MacNicol:*

Q. You would have to wire the power all the way from the source?—A. Yes, but you would be taking it there anyway because the province of Saskatchewan

has its high transmission lines and you might find that you did not have very far to go from your main transmission lines.

*By Mr. McNiven:*

Q. With regard to the power plan you referred to, is that the one investigated by the royal commission in 1928 in Saskatchewan with regard to the Elbow river?—A. Yes, there were no sites determined, but that was one of the proposals. We are talking now about actually finding a site on the river where we can say: "Now, we can build a dam here; this is a suitable site on which to build a large dam that will impound so much water, that will generate so many kilowatt hours." That is the positive thing to determine. We have not yet located a site on the South Saskatchewan river; we have hopes of certain locations. That is all

The CHAIRMAN: Before the witness goes on to another project may I say that Mr. Spence has kindly consented to show pictures of that development which will bring to our mind the future possibilities of developments of that nature in the prairie provinces to-morrow night at 8.15 in the railway committee room in the House of Commons. Mr. McNiven, chairman of the steering committee, has secured authority from the steering committee to proceed with the showing of these pictures to-morrow night. The showing will be open to all members and senators and their friends, and it should be well worth seeing. You may proceed, Mr. Spence.

The WITNESS: The Battle river development is a scheme very similar to the South Saskatchewan scheme which I have just described. All along the Battle river or for a considerable stretch of the Battle river from Battleford there are flats along the river which can be irrigated by pumps from a low lift. There will be approximately 10,000 acres costing \$300,000, 30,000 estimated acre feet. We will have to have weirs because the river gets low in the summer time and we shall have to have weirs to supply water for pumping purpose.

Mr. CASTLEDEN: Most of the soil is of a light variety?

The WITNESS: It responds to irrigation. We have had wonderful results at the mental hospital farm at Battleford. The provincial government have 500 acres under cultivation at Battleford. Previous to irrigation they had to purchase feed for live stock, also vegetables for the patients at that institution, approximately \$20,000 worth of those commodities, and I remember when I was minister it was always a drag to go to council and ask for that money. As a result of the irrigation development they have not only saved that outlay in cash but have a surplus now available for the other institutions and, I suppose, a surplus for sale in addition.

Mr. McNIVEN: The average production on 120 acres has been 6½ tons per acre for the last three years.

The WITNESS: It is enormous. The point I am bringing out now is that that soil responds to irrigation even if it is light.

*By Mr. Castleden:*

Q. How much water would you require in dry years?—A. There is no limit as far as the supply is concerned, because they are pumping it out of the river, and I imagine at Battleford they are putting on all they need.

Q. These figures would be valuable in the light of covering a large area?—A. It can be computed.

Now we come to the Qu'Appelle valley. This is right in the heart of a great grain producing area and here you can produce the things that are needed particularly in dry years to stabilize the wheat growing and mixed farming industry.

Q. What is the total acreage?—A. 30,000.

The next one is Highwood river—that is a flood protection project—\$500,000. It has not much to do with irrigation and there is no estimate for it, and it may be doubtful whether the P.F.R.A. should undertake work of that kind. We have made engineering studies and I know what it is likely to cost. You know the difficulty with floods at that point.

The next is the Assiniboia river. That is very much the same thing as the South Saskatchewan river, the Battle river and the Qu'Appelle river. In that we store waters at the headwaters and irrigate flats and parts of the river right down to Portage la Prairie. We can divert water and irrigate a large area of land down near Portage la Prairie. They are now engaged in the sugar beet industry in Manitoba, and it was felt that this might be a useful project in connection with that industry.

Then there is the North Saskatchewan Pump Irrigation project. I have a lot of information about that. It has a low lift, I understand, 10 or 15 feet.

Then there is Thunder creek. I think that was referred to by Mr. MacNicol. That is a project to irrigate 200,000 acres at a cost of \$8,000,000, and the point of diversion might be somewhere around Riverhurst. If a power dam or some other dam were erected on the South Saskatchewan river, near Riverhurst, that would be the location of that diversion, if a site is found, where water can be lifted to the high level. Oak lake flood irrigation project is in Manitoba. Pellican lake storage project; White Water lake irrigation development.

*By Mr. Matthews:*

Q. You made reference to Oak lake. What did you have in mind there?—

A. Project No. 39: Oak lake flood irrigation project:—

*Purpose.*—To divert water from Pipestone creek to irrigate lands along Oak lake in Manitoba.

*General.*—Large hay flats around Oak lake are flooded in wet years and a considerable amount of hay is harvested. In dry years there is no natural flooding. This could be achieved by diverting Pipestone creek and carrying the water to the lands by canals.

It is a hay proposition; more information required. Perhaps I should conclude with this statement from the engineers' report:—

It has been fairly well established that the water supply supplemented by storage estimated is sufficient for all of the 42 projects listed.

*By Mr. Ross:*

Q. Would you say a little more about the Highwood river, what you had in mind as far as that project is concerned?—A. We were just coming to that. Project No. 10: Highwood river flood protection:—

*Purpose.*—To prevent flooding at the town of High River either by protection works, storage on the river or diversion through the Little Bow river to Arrowwood creek and back to the Bow river.

*General.*—The Little Bow river heads practically on the bank of the Highwood river near the town of High River. When the Highwood river is in flood it overflows its banks throughout the four-mile section above the town. Part of the water goes down the Little Bow, but that portion which returns to the Highwood river lower down, floods the town and the surrounding lands.

The water has to be returned to the Bow because it is used further down for irrigation.

It would be a simple matter to turn the Highwood river down the Little Bow valley but the objections to this are as follows:—

1. Property damage along the Little Bow river consisting of bridges and flood lands.

2. The Highwood is an important tributary of the Bow river and the diversion would seriously affect the water supply of that stream.

At a point in Sec. 18-17-26-4 there is a divide between the Little Bow river and the head of Arrowwood creek. By the construction of a dam of reasonable height across the Little Bow river, say in Sec. 13-17-27-4, it would be possible to divert Little Bow and Highwood river water into Arrowwood creek and thence back into the Bow river above Gleichen.

The CHAIRMAN: Mr. Spence has outlined quite a number of projects. If any member feels he is interested in any particular one he is now at liberty to ask questions of Mr. Spence; if not, Mr. Spence might be very glad to get a recess.

Mr. MATTHEWS: Is it hoped to have Mr. Spence with us again?

The CHAIRMAN: That is a matter for the committee to decide. Naturally if we wish him again we would suit his convenience. I have not asked him whether he is prepared to stay down here, but he is going to show us some pictures to-morrow night.

Mr. MATTHEWS: He has given us so much information we hate to part with him.

Mr. ROSS: Mr. Chairman, I wish to make a few observations with regard to the western C.P.R. irrigation plan. It will be familiar to Mr. Spence but not to other members of the committee, and therefore perhaps I might make a few observations with regard to it first. The water to irrigate that area comes from the river; the river is tapped within the city of Calgary. The water comes from the river and a canal carries the water to lake Chestermere some 10 miles east of the city. From lake Chestermere the water is carried some four or five miles north of the lake. There were three canals built by the C.P.R. company; the north canal is called C canal. Another canal runs about in a straight easterly direction for some 30 miles, called the B canal, and then there is an A canal running in a southeasterly direction. We have been having considerable rain, more than was anticipated at the time the work was developed. That is, we had been having considerable rain up to 1929 and 1930, more than was anticipated, and the irrigation is being abandoned at these places. The C canal that I have spoken of runs north and it has been entirely abandoned; it has been closed. This canal project cost millions of dollars, and I think it is a matter of very serious importance. The north canal has been entirely closed; the B canal which runs straight east has been almost entirely abandoned. I do not suppose there are more than 500 or 600 acres at the outside that is now being served with water by the C.P.R. company; the rest of it has been abandoned so far as an irrigation project is concerned, and the C.P.R. which acquired this other irrigated land will close the other canal too. The A canal also has been abandoned as an irrigation project.

Now, the canals are there and I think they would be very valuable for irrigation projects later on. However, the C.P.R. has been unable to make a success of it so far as an irrigation plan is concerned. They have been trying for some 25 or 30 years to make a success of it. However, it seems to me something should be done in order to retain these canals, A and B, that still exist for stock watering purposes or for some other such purpose. They run down along the high land and if they could be maintained for stock watering purposes it would be a great help; it would also be very valuable to the farmers on the side who can divert enough water and irrigate enough land themselves in order to grow coarse grain and vegetables of one kind and another. The area, it seems to me, could be made a very valuable area that would support a population two, three or four times as great as the population there now. I was wondering if the P.F.R.A. or Mr. Spence's committee could not do something in the way of working out a plan with the provincial government whereby these canals could be

retained. They are bound to be closed in the very near future unless something is done.

Mr. MACNICOL: Is the C.P.R. trying to sell their rights?

Mr. ROSS: No. The farmers make a deal with C.P.R. in the spring, but now they say, as a matter of fact, "we do not want to pay 50 cents an acre for irrigation." That is what the C.P.R. is charging. "We do not want to pay 50 cents an acre for irrigating, we will surrender our rights to have our land irrigated at 50 cents an acre if you will release us from this assessment." That is the way it is working out. The farmers are signing off with the C.P.R. The C.P.R. is releasing them from the obligation to pay 50 cents an acre and the C.P.R. is no longer required to irrigate that land. That is the way it is working out. There may come a time when they will need irrigation. There is less snow on the mountains than there used to be. I know that thirty years ago there was far more snow on the mountains than there is at the present time. These streams have been becoming lower. We may need that irrigation some time. We certainly need the canals for stock watering purposes. There are a number of dairy farms and a number of good farmers around there using the canals for stock watering purposes, but their rights so far as irrigation is concerned have been surrendered. The C.P.R. could close those canals, and they are bound to close them because they are not going to carry them at a loss. They are carrying them at a tremendous loss each year now. There is nothing to prevent them closing them, I understand. I wonder if Mr. Spence and his committee could not do something in the way of continuing these projects and making sure that these canals are not closed because they cost a pile of money to build and it would be a calamity if they were closed. It would be a terrible loss to the province and to irrigation.

The WITNESS: Mr. Chairman, in answer to Mr. Ross' question, I may say I am quite impressed myself with the case as stated by him. We have had several discussions with the interested parties—I mean by that the men who are using the water and the provincial government officials, particularly the water rights branch of the province of Alberta. We have had one joint conference with the officials and the provincial government and the farmers interested and the result of that conference was—

*By Mr. MacNicol:*

Q. Joint conference consisting of whom?—A. Members of our organization and the officials of the provincial government and the water users in the area.

Q. Alberta?—A. A representative committee of the water users.

Q. Alberta?—A. Yes; and the result of the conference was that it was decided to go to the C.P.R. with a proposition. I have no further information with regard to it, and so far as we are concerned the matter rests there now. But I want to say this, that a project is never dead with us, never.

Mr. HILL: Before the committee rises I should like to express my personal appreciation of the splendid practical evidence that has been given us by Mr. Spence in this meeting. Up until this time most of the evidence we have been given has been theory, but we have obtained in these two days something on which this committee can make recommendations to parliament for the use of more labour to take up the slack in the immediate post-war days. He has also given us some practical information on which we can base recommendations for construction and development that will give permanent employment to a great number of our citizens in the future. I want to express my personal appreciation of the way Mr. Spence has handled his subject and to suggest to you, Mr. Chairman, that in the future we should endeavour to get men who will give us practical information from their own practical work.

Mr. MACNICOL: Mr. Chairman, as a rule I am rather hard to please in these matters, but I like to listen to men who show that they are practical to start

off with, and I have been very greatly pleased with Mr. Spence's comments before this committee.

Mrs. NIELSEN: Mr. Chairman, I, like other members of the committee, have been greatly impressed with the evidence given by Mr. Spence. The question of land reclamation and of water supply in that country is going to do much to help us in the placing of our returned men on land which is suitable for them to go into real agricultural production when they return. Of course, the great thing is this: if we are going to have not only returned men but our farming people who are on their farms now, producing the vast quantities of produce after we really get going again, how are we going to find markets for our products? Without doubt in a few years to come we shall not be supplying Great Britain or the continent with the huge supplies which we are now sending there, and we shall have to find ways and means of using our agricultural products. I myself know that during the last ten years we had farming people in some areas living next door to starvation while they had a luxuriant growth on their farms. I have not forgotten the time I grew 600 pounds of nice green tomatoes and had to sell them for a cent a pound. That kind of thing must come into our consideration in our post-war planning. I wonder if I might suggest to the steering committee that they have someone come before us who would give us some idea of the uses which industry can make of agricultural products; someone who in a practical way can give us some satisfactory information with regard to the possibility of setting up secondary industries such as the making of cloth and fabrics from milk and from the various seed bodies or grain tissues. If we could have some ideas in that regard I think we would be more justified in placing our men on the farms particularly if we know that we are going to have secondary industries that would help us absorb some of our vast agricultural production in the years to come. I would like to suggest to the steering committee that uses for our agricultural products must be found, and that it would be part of our steering committee's job to fully investigate this field of industrial uses for agricultural products, and that we should have someone come before us who could give us some information as to what research has been made along that line. That would be valuable information for us to have.

Mr. CASTLEDEN: If Mrs. Neilsen would put her suggestion in the form of a motion I shall be pleased to second it. We were told the other day when we were discussing the matter of coal in Nova Scotia—it was said: Give us the markets and the price and we will give you work; we will carry on production. The whole scheme we are dealing with here to-day shows us the possibilities of production in this country, but as Mrs. Neilsen has said, unless we have more markets the whole thing is useless. Even so late as since the beginning of this war I remember an order going out to the sugar beet growers of southern Alberta to curtail their production. I do not believe that order was carried out. I well remember in Saskatchewan when barley could not be sold—it was bringing about 6 cents a bushel to the farmer—and wheat by the millions of bushels was selling at 27 cents to the farmer. There are 280,000,000 bushels of wheat in the west to-day which the farmer is not permitted to sell, and nobody will buy it.

Mr. HILL: That is because you cannot transport it. There is a market for it.

Mr. CASTLEDEN: No, no. I can remember less than six years ago when a 1,500 pound steer would return the farmer about \$2 by the time he paid his freight to Winnipeg. And they would not even bother growing hogs. Unless we solve the problem of markets, the problem of production is not really solved. We must have the markets for our products before we can continue production. In view of that I would be very pleased to second the motion if Mrs. Nielsen would make it.

The CHAIRMAN: I think it was more of a suggestion, and I think that would be the better way to leave it. These matters must naturally commence some

place and they must land some place. What we had yesterday and to-day is, I think, leading up to the question of the break-down of the concentration of industry and the spreading of industry to various parts of Canada, particularly in the prairie provinces. While it is true that production is not much good unless we have markets, it is also true if we do not have production markets are no good to us. If we do not have production our own population would starve to death.

Mr. CASTLEDEN: We have had production in the past.

The CHAIRMAN: We will reach the question of markets later on. The steering committee is meeting to-morrow.

Mr. GERSHAW: In discussing priorities of the different schemes I am sure Mr. Spence will keep in mind not only the feasibility but also the fact that schools, roads, hospitals and railroads are adjacent to some schemes and far far removed from others. I think if we are going to establish returned soldiers or people from dried-out areas in these places, the factors that I have mentioned are very important.

Mr. HILL: Mr. Chairman, I should like to say that in my opinion what Mr. Castleden has said is very true. What I think this country needs more than anything else is decentralization of industry. What we have been trying to do is centralize industry in certain sections and have long transportation costs to deliver the products to the other parts. Then we have centralized agriculture, with long hauls which destroy the value of the agricultural products. We should try to work towards decentralization.

The CHAIRMAN: That is one of our objectives.

Mr. HILL: Good.

Mr. BRUNELLE: Could Mr. Spence tell us if it is practical to grow grain on irrigated land? I heard Mr. Ross a while ago speak of growing coarse grain on irrigated land. I wondered whether the plan is to irrigate the land to grow vegetables, to water stock or what.

The WITNESS: Well, so much depends on conditions and the question raised provides subject material for an hour's discussion. Generally speaking there is a place for grain growing on an irrigation project in the early stages of its development, but as the development proceeds and as the farmer begins to get live stock around him, canning factories come in, sugar beet factories come in, and that sort of thing, the tendency is to get out of grain entirely; to put it this way, to produce crops that are worth more than a cent a pound. That is the tendency. You get in Alberta the perfect picture of irrigation economy. Take Saskatchewan and Alberta; in Saskatchewan we are still in the grain stage. The development in the province of Alberta has got out of the grain stage. The Canada Land and Irrigation Company is an example of the transition stage. In Lethbridge, Taber, and to some extent at Brooks they are getting very rapidly out of the wheat stage and getting into dairying and specialized crops. Dr. Archibald here is in a far better position than I am to speak on this and I have no doubt he would not mind elaborating on the point because it is important.

Dr. ARCHIBALD: I think I can sum it up in a word as Mr. Spence did. Farmers as a rule cannot afford to grow on irrigation. The cost of distributing water under average circumstances is too great, to say nothing of the cost of the water in contrast to large scale highly mechanized dry land farming; but there is a place for a certain amount of grain growing among those specialized crops. For example, in the Lethbridge district around Picture Butte the sugar beet industry is now well established and it is creating a better balanced type of agriculture and grain is grown there largely not so much for its intrinsic value but as a seeding down crop or a nursing crop in the seeding down of legumes. They are used because of their nurturing value to the soil, the legumes

enrich the soil, and the refuse from the sugar beet factory is also absorbed by the live-stock industry, not only the leaves and trimmings from the field but also the beet pulp is absorbed; so you have the three necessary factors for the live-stock industry and that in turn discourages any large-scale grain growing. Grain has a limited place even in a well established irrigation area, for an entirely different purpose than commercial grain growing on a large scale under dry land conditions.

The CHAIRMAN: Mr. Spence, I do not have to convey to you the feeling that this committee has with respect to the presentation which you have made to us: it has been excellent, and the thanks of the committee has been well expressed by Mr. Hill, Mr. MacNicol and others who have just spoken.

The committee adjourned to the call of the chair.

## APPENDIX A

## AREA IN P.F.R.A. BOUNDARY

|  | No.<br>Farms  | Acres in<br>Farms | Improved Acres<br>in Farms |
|--|---------------|-------------------|----------------------------|
| Manitoba .....                                       | 22,931        | 8,252,667         | 5,463,874                  |
| Saskatchewan .....                                   | 112,189       | 48,225,446        | 30,865,307                 |
| Alberta .....  | 36,542        | 22,280,100        | 10,483,891                 |
|  | <hr/> 171,662 | <hr/> 78,758,213  | <hr/> 46,813,072           |
| Total land area P.F.R.A. Boundary .....              |               |                   | 103,300,000                |
| Total Range and Pasture area P.F.R.A. Boundary ..... |               |                   | 27,344,000                 |
| Total Range classed as such P.F.R.A. Boundary .....  |               |                   | 7,153,000                  |

If 3,000,000 were brought under irrigation it would be *about 3 per cent* of total land area, *about 4 per cent* of area in farms in P.F.R.A. Boundary.

*N.B.*—1942 area total for Prairie Provinces showed over 38,000,000 acres in grains, cultivated hay, including approximately 125,000 acres of potatoes and sugar beets.

## APPENDIX B

## SUBMISSION TO THE ROYAL COMMISSION ON DOMINION-PROVINCIAL RELATIONS BY THE ALBERTA CO-OPERATIVE SUGAR BEET GROWERS ASSOCIATION.

Lethbridge, Alberta, March, 1938.

MY LORD AND GENTLEMEN:

The association which we represent is a voluntary organization composed of all the sugar beet growers of the province. The purpose of our organization is to encourage the beet sugar industry.

## IMPORTANCE OF THE INDUSTRY

In asking the indulgence of your Commission we do so believing that the problems confronting the industry are of such importance as to merit your careful attention.

To indicate the value of this industry to the agriculture of our district and the community in general we submit the following figures relating to the 1937 beet crop:—

235,481 tons of beets were produced from 19,829 acres of irrigated land—  
an average of 11.88 tons per acre.

75,603,700 pounds of sugar were manufactured.

3,813 pounds was the per acre yield of refined sugar.

\$3,040,000 worth of sugar was manufactured.

\$155 was the total gross return per acre.

\$77.50 was the gross return per acre to the farmer.

\$77.50 was the gross return to the manufacturer.

\$25 per acre was paid for hand labour by the farmer.

We believe that this land is producing more food value per acre than any other land in the Dominion.

Sugar beets of high quality and satisfactory yields can be grown, harvested and manufactured into refined sugar on all of our irrigated tracts in Alberta and this industry has, in the districts where it is established, made a tremendous contribution toward the prosperity of both the urban and rural sections.

The beet sugar industry holds a unique and unreplaceable position in the economy of irrigation farming in Alberta.

It has amply demonstrated its value as a means of employment of both agricultural and industrial labour, and is thus a means of assisting in the solution of our unemployment problem.

Refined sugar from sugar beets is a 100 per cent Canadian product and its production is an internal industry of inestimable value to the Dominion.

In case of war, the possibility of which is not remote, the nation that is most nearly self-sustaining has a tremendous advantage. Combatant nations have always spent much of their energy in the destruction of enemy war and food materials on the high seas and in blockading ports of entry. Efficiency in this type of warfare has increased greatly in modern times. Canada should prepare to be as nearly self-sustaining as possible. In so far as sugar is concerned such an objective can only be attained by the expansion of the beet sugar industry. At present sugar from beets constitutes only 14 per cent of our total sugar consumption in Canada.

Refined beet sugar is of equal food value and has the same chemical composition as cane sugar.

The by-products of the industry, beet tops, pulp, and molasses support a large live-stock feeding industry. During the current year 5,000 head of cattle and 40,000 sheep are being fed in the vicinity of the two Alberta factories.

#### PROBLEMS CONFRONTING THE INDUSTRY

(1) The beet sugar industry is owned and controlled by cane refining interests and exists by their sufferance.

(2) Freight tariffs on refined sugar are relatively higher in Western Canada than those existing in the United States under comparable geographic and transportation conditions.

(3) The present Dominion Excise tax of \$1 per cwt. on sugar adds approximately 25 per cent to its wholesale price. We believe the payment of ten millions of dollars annually is unjust discrimination against this important food product and tends to materially decrease consumption. At present sugar is placed for taxation in the category of a luxury.

(4) The beet sugar industry in Canada is entirely dependent upon the maintenance of the present tariff structure, and we are authoritatively informed that a definite effort is being made to remove the import duties on refined sugar.

(5) There apparently exists a disposition on the part of our Senior Government to make commitments affecting branches of agriculture without due consideration of the interests of the producers concerned. This fact is borne out by the statement made by Canada's representative at the London Sugar Conference in May 1937 as follows: "At the same time, the Government of Canada reiterate the assurance already given that they do not propose to stimulate the production of sugar in Canada during the term of this agreement by subsidy, increased protection, special remission of taxes, or by any other similar measures." This undertaking could only be directed against the production of beet sugar.

#### RECOMMENDATIONS

With a view to assisting in the rehabilitation of agriculture, the relief of unemployment and the building up of a domestic sugar supply for abnormal times, we urge that expansion of the beet sugar industry be encouraged by every legitimate means.

As a means to this end we should like to submit the following recommendations to the Commission:—

(1) Since the beet sugar industry is in the control of cane sugar refining interests we submit that a complete investigation into the business methods and financial structure of these companies is essential and should be undertaken by the Government. If such an investigation establishes the fact that undue profits are being made in cane sugar refining or in the manufacture of beet sugar, or that these companies are curtailing the normal expansion of the beet sugar industry by unfair methods, we urge that appropriate action be taken by the Federal Government to correct these conditions.

(2) We believe that the three Prairie Provinces are logical markets for beet sugar manufactured in Western Canada, and we recommend that freight tariffs be adjusted to make these markets available. We suggest that this may be accomplished by establishing a "manufacturing in transit" rate on sugar similar to the "milling in transit" rate and the "malting in transit" rate now existing in Canada, or by reducing the present rates on refined sugar to a point comparable to those in effect in the Western United States.

Inasmuch as the feeding of live stock is inseparably linked with Sugar Beet Culture we also urge that the possibilities of a "feeding in transit" rate for live stock be investigated.

(3) In view of the unfairness of the present \$1 per cwt. excise tax we urge that this tax be reduced to 25 cents per cwt. which is approximately equivalent to the 6 per cent general sales tax now in effect.

(4) In view of the expenditure of money and effort in the rehabilitation of western drought areas and in consideration of the fact that no crop fits better into a scheme of irrigation farming, we urge that no action be taken by the Federal Government that would in any way jeopardize the present beet sugar industry. We have special reference to certain suggestions that are being made respecting the removal of the tariff on refined sugar. These suggestions, if implemented, would result in discontinuance of beet sugar production with very serious loss to Canadian Agriculture, to the beet sugar manufacturing industry and labour.

We believe that the agitation for a reduction in sugar prices is in the general interest of the consumer and indirectly in the interest of the beet sugar industry. This may be achieved by the reduction of the tax as indicated above without disturbing the present tariff schedules.

(5) We censure the undertaking made at the London Conference and suggest that inasmuch as the agreements have not been ratified by a number of signatory nations, the grounds be canvassed with all diligence for a means of abrogating this ill-considered undertaking. We also seriously urge that in future when such undertakings are being considered, proper representation from producers' organizations be invited.

It might be further added that in our opinion Canada should work toward the production of at least 50 per cent of its sugar in normal times. With a normal output of 50 per cent of sugar consumed it would be relatively easy to increase production to full requirements if the need arose.

In order to make this submission as brief as possible we have largely confined ourselves to statement of facts and recommendations arising from the same.

We are now prepared, if you so desire, to answer any questions arising out of this statement or in any way related to our subject. We are prepared to support and supplement all our statements with documentary evidence which we have at hand.

We wish to thank you for the courteous and considerate hearing you have given us.

ALBERTA CO-OPERATIVE SUGAR BEET GROWERS' ASS'N.

PHILLIP BAKER, *President.*

W. F. RUSSELL, *Secretary-Treasurer.*

C. O. ASPLUND,

LOUIS BRANDLEY,

WILLIAM REDD, "

*Members of Committee.*

Dated at Lethbridge, Alberta, March, 1938.



MR. N. E. SHEPPARD, PROFESSOR,  
THE FACULTY UNION,  
UNIVERSITY OF TORONTO,  
R. RE-4- TORONTO, ONT.

Gov. Doc.  
Can  
Com  
R

SESSION 1943

( HOUSE OF COMMONS )

( SPECIAL COMMITTEE )

ON

# RECONSTRUCTION AND RE-ESTABLISHMENT

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 9

TUESDAY, APRIL 13, 1943

WITNESS:

Hon. J. A. McDonald, Minister of Agriculture, Nova Scotia.

OTTAWA  
EDMOND CLOUTIER  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1943





## MINUTES OF PROCEEDINGS

TUESDAY, April 13, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11.00 o'clock, a.m. Mr. J. G. Turgeon, the Chairman, presided.

*Members present:* Messrs. Black (*Cumberland*), Brunelle, Castleden, Ferron, Gillis, Hill, Jean, MacKenzie (*Neepawa*), MacNicol, McDonald (*Pontiac*), McKinnon (*Kenora-Rainy River*), McNiven, Marshall, Martin, Matthews, Nielsen (*Mrs.*), Purdy, Quelch, Ross (*Calgary East*), Ross (*Middlesex East*), Sanderson, Turgeon—22.

Present as well, were the following Maritime members who had been invited, although not members of the Committee: Messrs. Isnor, Hazen, Emmerson, McCulloch, Pottier, Adamson, McGarry, Kinley and Hon. R. B. Hanson.

The Chairman introduced to the Committee the Hon. J. A. McDonald, Minister of Agriculture for the Province of Nova Scotia, who was to be the witness at this sitting.

Mr. Percy Black (*Cumberland County*), welcomed Mr. McDonald and expressed his appreciation to the Chairman and to the Steering Committee for bringing this witness before the Committee.

Hon. Mr. McDonald was then called and addressed the Committee on the Reclamation of Marsh Lands in the province of Nova Scotia. At the conclusion of the address the Chairman invited any members of the House who were present, whether members of the Committee or not, to put questions to the witness if they so desired. Many availed themselves of the privilege. The Witness then retired.

The Chairman informed the Committee that letters had been addressed to all Provincial Governments, asking them to send representatives to appear before the Committee after the Easter Recess. The Railway Companies would also be granted this privilege.

Mr. J. R. MacNicol, said that as a representative of the Province of Ontario, he would like to move a very hearty vote of thanks to the witness for his able presentation, and Mr. Brunelle, speaking as a representative of the Province of Quebec, indicated that he would be very glad to second the motion. The motion carried unanimously.

The Chairman then tendered the thanks of the Committee to the witness and Mr. McDonald replied briefly expressing his thanks to the Committee for their consideration and the interest shown in his presentation.

The Committee then adjourned to meet again at the call of the Chair.

WALTER HILL,  
*Acting Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

April 13, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11.00 o'clock a.m. The Chairman, Mr. J. C. Turgeon, presiding.

The CHAIRMAN: Gentlemen, we have a quorum. We will come to order and get started right away.

Mr. McDonald, Minister of Agriculture and Markets for the province of Nova Scotia is here, and he came on very short notice; he was coming to Ottawa anyway and he is appearing before us only on very short notice and I think to some extent he will depend on questioning to bring out the things that are in his mind concerning the principles of the rehabilitation of farm lands generally in the province of Nova Scotia. I do not know whether he could answer any questions about New Brunswick and Prince Edward Island or not. I will now call upon Mr. McDonald to give us whatever he wishes.

Hon. Mr. McDONALD: Minister of Agriculture and Markets for Nova Scotia, called.

Mr. BLACK: Mr. Chairman, before Mr. McDonald proceeds I should like to express my personal appreciation of the action of yourself and this committee, in having him appear before us, particularly in connection with the reclamation of marsh lands in Nova Scotia. Mr. McDonald has taken a great interest in this problem for a number of years and he fully realizes the necessity of reclaiming these marshlands which will benefit the whole farm area extending around the head of the Bay of Fundy. It is exceedingly good of Mr. McDonald to come here at this time when the Nova Scotia legislature is in session, and I want to express my appreciation to him for what he has done in this connection.

The CHAIRMAN: Your expression of appreciation to myself and Mr. McDonald should include your steering committee. It was the steering committee who decided to have Mr. McDonald appear before us while he was in the city.

The WITNESS: Mr. Chairman and gentlemen, I wish to thank you sincerely for the opportunity of being present here to-day at this meeting of your Reconstruction and Re-establishment Committee. I did not come with any prepared statement, but after speaking with your chairman by telephone yesterday, I jotted down a few notes on rehabilitation in general. I will mention these and then if there are particular questions that I can answer, or if I can help in any way, I would be glad to be at your service.

I am sure it augurs well for the future in helping to solve our most serious problems with which we will be faced in the rehabilitation period in having a committee composed of honest public men made of all political parties meeting together for the purposes for which you are called here. I am sure all of us here are interested in solving these rehabilitation problems and we have one objective in mind; that is to raise the standard of living among our people in rural Canada. We of Nova Scotia sincerely hope that we may be of assistance in helping the federal authorities in putting into practice the well-thought-out schemes in which this committee is helping at the present time in giving some leadership in the solution of these problems.

I may say that about three years ago an advisory committee on agricultural services in the province of Nova Scotia gave considerable thought to these problems. Perhaps you would like me to explain just what this advisory committee is. It is composed of the senior men in both the federal and provincial services in the province of Nova Scotia, and they meet from time to time, and their advice and help has been of great assistance. But, at a meeting about two years ago, we appointed a rehabilitation committee to look into the problems of rehabilitation and they have had a number of meetings. Their reports have gone to the central committee here in Ottawa and during the last year we have had a man on full time; one of our senior agricultural representatives, Mr. Mulligan, on this work, looking up suitable farms for settlers, and preparing themselves to be of assistance to those who will be wanting to settle on the land after this war is over. We have had an analysis of soils made, and we have what we consider to be a fair idea of the values of these farms. Now, we simply did this work with the hope that we might be able to pass on some valuable information to the federal authorities, if and when they want this information. We are doing this because we remember some of the mistakes that were made after the last war. I believe it is a decidedly encouraging sign that so much more thought is being given to the solution of these rehabilitation problems during this present war than was given to them during the last war.

I suppose sometimes some of us are apt to think the farmers are complaining people. I wish, if there is that thought in our minds, that we could get it out of our minds, because they are not a complaining people. I do not know how many members of this committee are rural farmers; how many of you have actively in the field, by your own sweat and labour, tried to earn a satisfactory living for your family; helped others as some of us have had to do, in meeting notes at the bank for fertilizer, spray materials and feed; but those of you who have gone through that, and through the low prices for farm products which prevailed for years before the war in this country will appreciate what I say when I state that I do not think we can honestly say that the farmers are a complaining lot. For years before this war started the share of the national wealth which our farmers received was practically one-third—that was during the years, 1912, 1913 and 1914—it was a third of that of the people of Canada; but that has now dropped to less than 15 per cent prior to the present war.

I think, Mr. Chairman and gentlemen, you will agree with me that if we are to have a satisfied and progressive people on our farms and if we are to stop this trek from the rural to the urban centres we must do what we can to see that the honest working farmers, fishermen and lumbermen get their fair share of the national wealth. I believe that this can be greatly aided by us, by both federal and provincial governments, by doing all we possibly can to help raise the level of efficiency and also by reducing the cost of production. To this end I trust that the tariffs of the transportation systems may be made to work for the people of the rural parts of Canada as they have in the past for organized industry and labour.

Another thing which public men can do to help our farmers and fishermen is to encourage them in their organization work so that they may be in a stronger position to solve their problems. I believe that there has been a serious lack of organization among our people in the past; and I would like if I might take the time, to mention some of the ways in which we have helped out this situation in the province of Nova Scotia. Take poultry: in 1934 we found the farmers disorganized. In many cases they did not know properly how to feed their poultry; they did not know how to handle diseases; and then when it came to marketing they were competing among themselves in the selling of the product which was not properly finished for marketing. We engaged a poultry promoter and gave him a small staff; and by the work of this man, Mr. Benoit—he has recently gone to the province of Quebec—but with the aid of two or three helpers he had educated our people so that we were able

to control disease; so that they were taught how to finish their birds properly for market; and then, when it came to marketing, we encouraged them to ship their poultry in to central pools and the department helped to get a maximum price for the poultry. I remember very well a farmer in Victoria—Mr. Black, Mr. Gillis and Mr. Purdy will know the part of the country about which I speak, that is away up in the northern part of the province—this man said, “what a difference between the period when we started this organization work and to-day.” He was telling me how he tried to raise two hundred poult along with his other poultry and he said he never expected to raise more than one hundred; or, rather, that he would lose one hundred, not knowing properly how to feed them and also because of disease; then, he said, when he came to selling all he could do was to go out and sell from door to door in competition with his neighbours. And now, because of this organization work which has been carried on in this branch of the service we have increased the grade of poultry marketed in this co-operative way from about 9,500 pounds in 1934 to over 340,000 pounds last year. We have increased the quality from 25 per cent milk-fed grade in 1934 to 82 per cent in 1942. We have made similar changes in lamb and pork and other agricultural products. In lamb, for instance, we have increased the quality of the grades A and B from 42 per cent in 1939 to 89 per cent in 1942. We have increased the A and B quality of pork from 65 per cent in 1936 to 80 per cent in 1942.

This organization work, ladies and gentlemen, has been a great help to our farmers of Nova Scotia in overcoming some of the problems they have had to face; but the greatest problem on our farms in Nova Scotia to-day, of course, is the serious shortages of labour. I now would like to go on record as appreciating to the full and expressing the thanks of our farmers for the very great help that the subventions and bonuses that have been paid by the government have been. Of course, if it had not been for these subventions and bonuses our farmers really could not have existed in many cases, because of their increased costs. We are anticipating and we are trying to work out ways in which we can overcome this labour shortage in Nova Scotia. Just the latter part of last week, before coming up here, I secured the co-operation of my colleagues of the provincial government and we are going to pay a bonus to tractor owners throughout the province to do more community work. We are going to make the agricultural societies responsible, the accounts will have to be o.k'd by them to the extension division of our department; and we hope in this way to overcome some of the labour shortage. We are keeping this assistance down to the harrowing of the land, because we were not sure that if the assistance extended to ploughing it might not encourage more spring ploughing rather than fall ploughing; and, too, it might perhaps have a tendency to encourage the farmers to use the tractors for ploughing when they should be using their horses. But we feel if they know they are going to get some assistance in the harrowing of their land they will be able to use their implements to get more acreage ploughed for increasing production this year.

One of the greatest helps that we have had from the federal government has been the subventions on grain feeds for livestock. One of our greatest worries today is what is going to happen to our farmers in the east after the war is over. I believe that some of these helps have got to be continued. There is a potential market for western grain in eastern Canada as well as in British Columbia. The producers from the western spaces and the deficient grain producing areas of Canada cannot get together now because of an artificial and arbitrary freight rate structure which prevents the prosperity of both groups of farmers. You will note that I stuck very closely to my text in reading that; because I know that this may be a contentious matter. We think, for instance, that the export rate on grain feeds should be applicable to the farmers in the east. We have up to the present time never been able to get the transportation companies to agree that this was right.

Now, another great assistance, especially to the beef and dairy industries of New Brunswick and Nova Scotia—and I think this would apply to all the eastern provinces—would be the reclamation of their marsh lands; and in just the last few days in the local legislature a resolution was passed unanimously asking for federal assistance in the opening up of the main waterways of these marsh lands.

Mr. MacNICOL: Of what?

The WITNESS: The opening up of the main waterways of these marsh lands. We have in the counties of Cumberland and Westmoreland nearly 100,000 acres of rich marsh lands which are not producing anything like the quantities of food that they are capable of if we could get the water drained away from these areas. In this connection I wish to take this opportunity of thanking the members from the east who have taken an interest in this matter. I feel sure that I would be voicing the sentiments of the province of Nova Scotia when I say that we are proud of Mr. Black for having brought this matter up on the floor of the house; and also of Senator Copp, of New Brunswick, who has taken a great interest in the matter. I would have the hope that many hon. members here might approve of having the Prairie Farm Rehabilitation Act revamped or amended so that it might be applicable to other provinces. I believe it is a matter of very great importance for our farmers in the east. I would like to remind the hon. members here that in Nova Scotia—according to the last reliable figures that we have—that in our province we were still importing at that time (1930) about \$12,000,000 worth of agricultural products. Of this amount \$4,000,000 was for meats, \$2,000,000 was for grain seeds and about \$750,000 was for butter. Now, we have made some progress I am glad to say in increasing the amounts which we are producing of agricultural products in the province of Nova Scotia, but to offset that we have increased buying power of our people, we have increased population; and I am very doubtful if the figures so far as the imports are concerned would be very greatly changed. From these facts, ladies and gentlemen, you will see that the reclamation of marsh lands in our provinces would not only be sound policy for the war but it would be sound policy looking to the future; and I sincerely hope that this committee may feel—that the members of the committee may feel they can give this matter their hearty support. I believe that the project has quite a lot of support in the Department of Agriculture at Ottawa. I think there may be a difference of opinion among members of the treasury board as to when this work should be done. Some of us feel that the opening of the main waterways should be started very soon. We believe that now is the time to get a start at this work which is largely a machine job so far as opening up the main waterways is concerned; as regards the lateral ditches, and the cleaning of the lateral ditches, the provincial department can assist in doing this. In fact, our agricultural engineer, Dr. Banting, is now devising a ditcher which will dig slanting ditches, and it is necessary to have slanting ditches as most of you probably know in that type of soil in order to have them remain open; a straight wall ditch would soon fall in. But I trust, ladies and gentlemen, that you will ask me any question you care to in connection with this matter. If there is anything I can add to the information which you now have I shall be glad to answer any questions which I can. There are other ways that could be talked of, but I feel that I am taking up too much of your time. I might mention before taking my seat that we have at Truro a very efficient staff at the Nova Scotia agricultural college. We are rather proud of the men who compose that staff. They have done splendid work. We have leaders from that college scattered over all the American continent. That college, however, can do much greater work than it has in the past, and I would like to make use of this oppor-

tunity to say that we would be glad to co-operate with New Brunswick and Prince Edward Island in making the facilities of this college available to many more boys than it has served in the past. I thank you.

The CHAIRMAN: Ladies and gentlemen, just to give Mr. McDonald a rest before we proceed with questions may I say that it was the intention of the steering committee to have Dr. Archibald, the head of the experimental farm and a director of the Prairie Farm Rehabilitation Act, here today with Mr. McDonald. At that time we thought that this meeting would be held on Thursday rather than today, and Dr. Archibald is out of town. We are holding our meeting today to suit the convenience of Mr. McDonald, and that is also our reason for being in this room instead of 497. Now, the meeting is open to questions and I am sure that Mr. McDonald will be glad to answer to the best of his ability any questions that any member of the committee may wish to ask. I think I am expressing the feeling of the committee if I say now that any members who do not belong to this committee are permitted to ask questions if they wish. I know there are a number of maritime members here who are not members of the committee.

*By Mr. Purdy:*

Q. Mr. McDonald, the map on the wall is a very small one but perhaps you could show the committee where the marshlands of Nova Scotia and New Brunswick are mainly situated?—A. Yes, the marsh areas to which I have referred are mainly in Cumberland county—Mr. Black's constituency—and Westmoreland county in New Brunswick. Around there there is an area approaching 100,000 acres, and most of it needs draining very much. Besides that the dykes are fallen down. Now, this is a large project; it is a project that cannot be done by the farmers because they cannot finance it, and that is why we have had to come to the federal government to ask for assistance.

*By Mr. McDonald (Pontiac):*

Q. Are there many farmers on those lands?—A. Yes, a large number of farmers own tracts of land in those marsh areas. Their uplands farms are near there, and in some cases the marsh areas would adjoin the farms; in other cases they do not, of course.

*By Mr. Purdy:*

Q. There are other marsh areas in the province of Nova Scotia, are there not?—A. Yes, there are other marsh areas in Nova Scotia, in the valley area there are large areas of marshes, and in part of your constituency of Hants there are marsh areas.

Q. In fact, all along the headwaters of the Bay of Fundy and Minas Basin?—A. Yes.

Q. They were claimed by the Acadians, and a good many of those marshes have gone back.

Mr. Ross (*Calgary*): Are those lands that would be flooded by high tides?

The WITNESS: They are when the dykes are broken down.

*By Mr. Hazen:*

Q. In driving along past Hopewell Cape in Albert county, you can see where the dykes have gone out and you can see where the sea has come in and you also see what was once land that produced a good deal of wealth which is now absolutely destroyed; it is now mud flats. These dykes have gone down, and I suppose the same condition exists in other parts?—A. Yes.

Q. Now, the dykes have gone down, and you say that the waterways should be opened up, therefore I presume the dykes would have to be rebuilt?—A. Yes.

Q. Not only have the waterways to be opened up but the lateral ditches have to be cleaned?—A. Yes.

Q. Now, let us come back to this point: why was it that the dykes went down in this land which was once so fertile and which produced a lot of wealth? Why did the farmers allow the dykes to go down? Why did they fail to keep their waterways clean? Why did they fail to keep these lateral ditches clean? Here was land that produced valuable crops and yet they allowed it to go; why was that?—A. I am glad you asked me those questions. These dykes were first built by the French who settled in those areas. So long as the price of agricultural products remained at a sufficiently high level the farmers had interest enough to keep their dykes and their dyked lands and marshlands in repair, but gradually prices lowered and lowered to a point where they did not feel they could afford to keep their marshlands up.

Q. Does it not come down to this: If the taxpayers of this country go to the extent of establishing these dykes again for the farmers and fixing these lateral ditches—if the taxpayers dig in their pockets they naturally want this to be a business proposition; and are the prices going to be such in that part of the world that they are going to get enough out of them to pay for the outlay? Is not that a question which arises in connection with this problem?—A. I think this is valuable hay land and could produce quantities of hay and grain and some of the roughest stuff used for improved pastures, and that they could compete with the west in growing their own beef.

Q. Why did they not do it before?—A. The price went to that low level and conditions became so discouraging that they did not want to continue to do it.

Q. Does there not have to be more co-operation? If we put these dykes in, do we not have to go a step further and have some greater co-operation? If we put these dykes back and allow every farmer to go on his own initiative are we going to be any better off? There has to be more co-operation.—A. We are not asking that the government put the dykes back in whole; we are asking for assistance first. The first thing that will have to be done is that we would have Mr. Russell, the chief engineer of the department, with an engineering staff, and we would be glad to have our men in the province help—make a survey. That survey will have to be made, and this matter will have to be gone into and we will have to get the best engineering advice we can get. Then, we believe that one of the first things to be done is to protect the dykes that have not gone out but are on the point of going out, and after that, as soon as possible, to deepen these main waterways so that the large forces of water that are collected in the upper reaches of the marshlands can be brought out.

*By Hon. Mr. Hanson:*

Q. May I ask a question? Was not the drop in value of this type of production based on the fact that the automobile drove out the market for hay? Was not that the principal product of the marshes—I am speaking of the Tam-tromor marshes, which I know very well. When the automobile came in the horse went out and the hay crop became much less important. The export of hay from that area, as I recall it, was a big thing and was important for the fattening of beef cattle, and that was made unprofitable. If we can build up the beef cattle production in that country would it not be worth while?—A. It surely would. I am glad you mentioned the fact that a lot of this hay was used for the horses that were in the country at that time particularly in the mines and in the towns, and when the automobile took the place of the horse that reduced the market for the hay; so much so that the price of hay for a term of years along about 1918 to 1920 was \$15 a ton and it dwindled down to around \$8 a ton.

Q. Pressed hay.—A. Yes.

Q. We have the same situation in the lower reaches of the Saint John River valley at Fredericton.

*By Mr. MacNicol:*

Q. Have you a large abattoir in that country to take care of the processing of cattle if sufficient cattle were there?—A. We have an abattoir at Moncton; that is in Westmoreland county.

Q. What capacity has it?—A. It is a Swift plant. It has a sufficient capacity for anything that might be produced in that area.

Hon. Mr. HANSON: I think they are going to establish one at Fredericton.

The WITNESS: We have been trying to get one established in Halifax, but we have not got it started yet.

Mr. MACNICOL: I asked that question because a member said yesterday in another place in this building that there was no abattoir at Saint John and for that reason the cattle in New Brunswick do not have the market they otherwise should have. That struck me as being very peculiar—a province without an abattoir; but you say there is an abattoir?

The WITNESS: Yes, there is one there sufficient for present needs.

*By Mr. Hill:*

Q. I suppose your department has not yet made an estimate of the cost? Could you give us an idea how much it would cost per acre to reclaim those lands?—A. Mr. Hill, the engineers made a rough estimate and they said that we should have at least \$200,000 to start with.

Q. Yes, but what they should first give us is an estimate of the total cost so we could estimate how much it would cost per acre. I am of the opinion that it would cost very much less per acre to make a real project of this than it costs in the west to irrigate land?—A. I think you are right, sir.

Q. It costs around \$30 an acre.—A. Well, I have no right to say that because I am not competent to judge.

Q. I think it is true.—A. Certainly, we are not asking for any large amount of money when we consider the amounts that have been spent in the reclamation of land in other areas.

Q. The first thing is to make a complete survey and give us the complete cost, then we can base it on the acreage reclaimed and get the cost per acre, and I think we can prove that it will be economical.—A. Yes, we have suggested that the engineering services ought to do that.

*By Mr. McKinnon:*

Q. Have you got an estimate of the cost of the opening of the waterways in those 100,000 acres—the approximate cost per acre?—A. No, I have not. We could work it out very quickly. The engineers who did the survey work estimated it would cost \$200,000 to open the main vents on the nearly 100,000 acres.

Q. Now, with regard to the transportation problem. You mentioned that if the farmers could get the same assistance as industry and labour have had in the transportation system it would make a big difference. What did you mean by that?—A. Well, in connection with transportation, the grain feeds from western Canada.

Q. You know the present rate, do you not—you know the rate now?—A. The federal department is paying the rate from the head of the lakes—the freight rates from the head of the lakes—less 50 cents. Of course, if we could get that continued it would be very satisfactory, as I pointed out in my preliminary remarks, but up to that time, up to the time that was done, a

number of people from the eastern provinces made representation to the transportation systems with the hope that we could get the export rate under normal conditions. I do not see why we should bonus the producers' livestock in lands across the water ahead of our own people. For instance, feed in Nova Scotia was costing \$2.90 a ton more than feed was costing the farmer in Denmark.

Q. In other words, you want what Mr. Tom Reid has been fighting for in British Columbia?—A. Yes.

Q. The export rate on feed. If you got the present maritime rate that is extended to you on feed grain from the head of the lakes would that be satisfactory?—A. Quite so, sir. We hope that something like that might be done.

Q. Now, did you mean to go further than that in as far as transportation is concerned; did you mean to suggest that there should be more rail lines running into certain areas?—A. No, I did not, I was not thinking of that. There are some freight rates on products, for instance, being shipped from Nova Scotia to places in Ontario that are higher than the rates from Ontario to Nova Scotia—things like that I have in mind.

Hon. Mr. HANSON: Is not that offset by the Maritime Freight Rates Act?

The WITNESS: Partly so.

Mr. PURDY: Based on the experience of some of our farmers in Nova Scotia to-day who have upland farms with a good bit of marshland adjacent to them, do you think the Nova Scotia farmer can compete in the livestock markets with the western farmer?

The WITNESS: I do, Mr. Purdy, and we are doing it. For instance, take the Nova Scotia sanatorium—a Nova Scotia government institution at Kentville—there has not been a pound of western beef put into that institution during the last ten years, and people who have seen that beef and who know beef, experts, say that the beef is as good as anything that can be produced in the west.

Mr. BRUNELLE: Is that marshland good for the growing of any kind of grain or is it good for growing hay only, because reference has been made to the growing of hay, and the falling of the price of hay apparently has ruined that district?

The WITNESS: In answer to that question I would say that I think that members who are here who have seen the farm at Nappan, the government farm, which has the same type of soil with the water drained off it, know that they grow a wonderful crop of hay, grain and even vegetables on that marshland.

Hon. Mr. HANSON: With proper drainage they can grow all the rough grain they wish, as well as hay.

The WITNESS: Yes.

Hon. Mr. HANSON: And they have done it on the Tamtromor marshes.

The WITNESS: Yes, and in the Cornwallis valley where my farm is.

Mr. EMMERSON: Is it not fair to say that the people in the maritime provinces, especially around the headwaters of the Bay of Fundy, are not asking that the government do their ditching and their draining for them, but that they are prepared to do their own draining of their own marshes; but the important thing in a marsh is to keep the fresh water out of it, and the ditches are plugging up, and when fresh water lies on a marsh it follows that crops of hay cannot be grown nor can grain be grown.

The WITNESS: Yes.

Mr. EMMERSON: And the marsh owners only want assistance in the vent ditches so that they can drain their own marshes with their own ditches; is not that right?

The WITNESS: That is right, sir. As I intimated earlier, this opening of the main waterways is a job that is too big for the farmers to tackle themselves. They have not the equipment. They have not the money to finance it. But they are perfectly willing—and they have so promised—after the main vents are opened, to themselves open the lateral ditches.

*By Hon. Mr. Hanson:*

Q. What about the cost of replacing the aboideaux? That is quite an expensive thing, is it not?—A. That is work, in the larger aboideaux, on which I would think they would have to have some financial assistance.

Mr. HAZEN: They would have to get assistance for their dykes. Those dykes have all gone out.

Hon. Mr. HANSON: I think so.

The WITNESS: Help could be given by having some machinery. For instance, just last year the ground on the Grand Pre dyke went out, and we got a large shovel, a Diesel shovel, and by machines put that dyke back in a very small amount of time.

Mr. MARTIN: There is too much talking, Mr. Chairman.

The CHAIRMAN: Order, please.

The WITNESS: That was put back in a very small amount of time compared to what it would have taken if it had to be done by hand labour. That just illustrates what can be done by machinery in this matter of dyke repair.

*By Mr. Brunelle:*

Q. I think you said there were about 100,000 acres.—A. About 100,000 acres.

Q. In that area?—A. In this area, yes.

Q. Is most of the land abandoned at the present time, or what percentage is abandoned?—A. I have not the figures here, but I would say that it would be, Mr. Black, I guess half of it.

Mr. BLACK: I would say about half of it. As an indication of that depreciation, this land used to be valued up to \$200 an acre—\$100, \$150 to \$200 an acre. The land often sold for \$200 or more per acre. I think 50 per cent of the land can now be purchased for one-tenth of that, or say \$20 per acre. It has deteriorated to that extent. It grows only about half a ton of hay per acre where it used to grow two, two and a half to three tons an acre, but the hay that it now grows is of the poorest quality; while if the land were properly drained and cultivated, the quality of hay would be equal to anything that can be produced in Canada.

I am sorry that Dr. Archibald, Director of Experimental Farms, is not here. He has had the experimental farm make a study of the reclamation of the marsh lands and their cultivation, and the records of what they are producing at Nappan are really amazing—three and more tons per acre of the very finest mixed timothy and clover hay. Mr. McDonald has well said that the farmers are not now able to do the work which should be done; that is, the opening up of the main drainage channels and the vent ditches, the building of the dykes and aboideaux. They can look after the smaller ditches, which should be dug every 50 or 100 feet apart. Mr. MacDonald has pointed out that most of this work should be done to-day by machinery. In the old days the French Acadians and the farmer-owners did this work by hand labour. In those days you could hire labour for 75 cents per day and it will cost \$4 per day now. The value of the crop to-day is lower than it was fifty years ago when the fair value was \$15 per ton. To-day the value of the hay, ordinarily—it is higher the last two or three years—is about half of that, while the cost of labour and taxes has gone up several fold. So the individual farmer is not able

to look after his land; and unless the government can assist him he must abandon that land, which is the most fertile in eastern Canada. This means the degradation and deterioration of a whole countryside. Each farmer in the old days would own, say, twenty acres of this fertile land. They cultivated these marsh lands, and the crops from the marshes were a nucleus for the feed for their stock on the upland farms, and the farmers were fairly prosperous. Practically every farmer was producing a carload or two carloads of cattle fifty or seventy-five years ago. You would get a carload in those days where to-day you could not get an animal at all.

I think we have to decide and should decide now whether that fertile, rich land is to be abandoned, to be a scar on the countryside for all time, or at least in our day, or whether we are going to have it reclaimed and rehabilitated. I am quite sure the farmers will respond to any assistance that they will get. I think some work should be undertaken fairly soon. I agree with Mr. McDonald in what he has said. Surveys should be made and a plan decided upon without delay. A great deal of this should be work on at least a five-year plan, and the main drainage channels should be cleared out and opened up without delay, and the dykes and aboideaux restored in order that the land might again be brought into production. Every acre of marsh land should mean the cultivation of three to five acres of upland.

*By Mr. Quelch:*

Q. When did this land go out of production? About what year would that be?—A. It has been some years since it was producing the maximum amount. For instance, two years ago I walked over quite a lot of it. I think Senator Copp was there that day and he and some of the older residents told me they remembered their growing great crops of grass. I think Mr. Copp pointed to somewhere else there, indicating that it was a very heavy crop.

Q. About how long ago would that be?—A. It has gradually gone down; those crops have gradually gone down as the main waterways have filled up and the water has backed up. The water grass has gradually come in and killed out the timothy and the clover.

Q. The reason I asked that question was this. You said that the reason it went out of crop to a certain extent was that the prices received for the produce were not sufficient to encourage the farmers to continue. It seems to me that it is going to be very necessary in the future, if this work is done, that the government will guarantee to maintain prices. Otherwise the same thing may happen again. I think your statement proves that that area could not compete with western Canada. All during these years western Canada continued to expand its production whilst in Nova Scotia, an area that was once profitable has deteriorated. That shows that they were not able to compete with the west. During those depression years western Canada did continue to produce tremendous quantities. The farmers, it is true, went bankrupt, but they continued to produce just the same and they are still producing. If this work is going to be done not only in Nova Scotia but in western Canada, and if we are going ahead with this rehabilitation of the farmers, it is very necessary that we shall guarantee those farmers in the future that never again will prices be allowed to fall as they did, for instance, in 1932, 1933, 1934 and other years. If that happens, then those areas are bound to become distressed again, and the work we do now or in the next few years will all have to be done again because the farmers cannot keep up their maintenance work unless they can get the cost of production.

Mr. MACNICOL: I should like to hear from Mr. Hanson.

The CHAIRMAN: Order, please.

Mr. MACNICOL: I should like to hear Mr. Hanson elaborate further on the interjection he made some short time ago about the economics of the whole situation down there.

The CHAIRMAN: Would you wait until the witness has answered Mr. Quelch's question?

Mr. MACNICOL: All right.

The CHAIRMAN: Then we can take that up. Could you answer Mr. Quelch's question, Mr. McDonald.

Mr. MACNICOL: I think the ditch question is very pertinent to the whole matter.

Mr. QUELCH: The main point of my question was that it is largely a matter of the costs the farmers receive for their produce.

The WITNESS: Yes.

Mr. QUELCH: And the question of profitable markets.

The WITNESS: Yes. I can only say to the honourable member that he has brought up a matter of government policy; that is, whether the government will maintain prices or not. I would say that our farmers realize the need, I am sure, much more to-day than they did some years ago, for producing their own feed requirements. They are somewhat better organized and I do not think that some of the mistakes made in the past would occur again. But, of course, it is just possible that prices might go down to the danger point where the farmers could not afford to keep it up unless there was some government action.

Mr. PURDY: I should like to ask Mr. Quelch whether he feels that production in the west would have increased recently if over the years we had not paid bonuses to keep the western farmer on his land.

Mr. QUELCH: As a matter of fact, they did continue to produce. But the result was this: the small farmer disappeared and the large farmer took his place. That is why to-day in western Canada you have large syndicates. You have large areas owned by mortgage companies. What happened there was that when a farmer could no longer produce on a small farm, he went under. The mortgage company took the land, put four or five farms together and put one man in to run the whole thing, thereby reducing costs. The land continued to produce, but you have a very undesirable situation. You are gradually having ownership of the land by the mortgage companies instead of ownership by the farmer.

Mr. GILLIS: I should like Mr. McDonald to comment on two points I have in mind. The purpose of the committee in making an examination of the question is to determine just what the draining of these lands in the post-war period would mean to us. What I am interested in is to find out who owns that land at the present time. There are 100,000 acres there which you are going to reclaim, 50 per cent of which is abandoned now. Nevertheless, some one has title to it, and I should like to know who. Secondly, who owns the 50 per cent that is not abandoned? I should also like to know if the government is taking every precaution, in the event of going ahead with this work, to avoid speculation and having some one make a lot of money out of it; also, if the government is going to take the responsibility of reclaiming it, would the government utilize that land in the aftermath of the war for the purpose of settling soldiers on it, if it is suitable? The point I have in mind is that we do not want some one to step in there and buy that up, as Mr. Black says, at \$20 an acre and then sell it to some one for \$300 an acre later on.

The WITNESS: Mr. Gillis, I should be very sorry if any person could take advantage, in the way of speculation, of anything that we are suggesting here. I have this to say; so far as I know, the most of that land is owned by private individuals, by small farmers.

Mr. BLACK: 100 acres to a farm.

*By Mr. Jean:*

Q. What is the average size of a farm there?—A. In the neighbourhood of 100 to 125 or 150 acres.

*By Mr. MacNicol:*

Q. Where do the farmers live?—A. The farmers live on the higher lands.

Q. I spent three days surveying that, and I could only find high land south towards where Mr. Black lives and north towards New Brunswick. They do not live down in those marshes?—A. No. They live on the higher land.

*By the Chairman:*

Q. Is that on land owned by the same farmers who own the marshland?—A. Yes, the same farmers. If I might illustrate, I should like to do it in this way. There are farmers living on the Grand Pre Dykes. Their upland is near their buildings. They have a tract of marsh land at Grand Pre, common dyke land. That is where they get their hay. That is where they put their cattle for after-feeding. The same thing applies in the Amherst and Westmoreland county areas.

*By Mr. Purdy:*

Q. Some of the farmers live ten or twelve miles away from their marshes?—A. Yes. In my own case, on my own farm, we have dyke land that is six and seven miles away from our buildings.

*By Mr. MacNicol:*

Q. Yes, exactly. Then you have to go back and forth?—A. Yes.

Q. That is a long distance.

*By Mr. Castleden:*

Q. Referring to these men who own the farms we have been speaking about, may I ask if they own the title? Have they any mortgages?—A. Unfortunately, because of the depression and because of the low prices of farm products, too many of them have mortgages.

Q. What percentage would you say was their equity in the land today? Would they be able to keep it if the land were improved?—A. I think so.

Mr. Ross (*Calgary East*): Mr. Chairman, I just wish to make a few comments with regard to the matter. It seems to me that the reconstruction of these marsh lands is very highly desirable. They are apparently very valuable lands, and they could be reclaimed at a comparatively small cost, from what we have heard here today. I do not agree with the attitude of Mr. Quelch at all. I think his approach to this matter is rather selfish, if I may so. The whole of Canada has done a great deal for us in the west. It has done a great deal for the wheat industry. I think it would be only fair on our part if we would do something to assist the people of Nova Scotia and New Brunswick, in so far as these marsh lands are concerned. They have treated us fairly, and I think we should treat them fairly. I think that, after the war is over, it is one of the important reconstruction problems that should receive very serious consideration. I was wondering, however, just what could be done at the present time, without drawing too strongly on our manpower and also on the resources of the country, in the way of making a start in the developing of these marsh lands.

The CHAIRMAN: May I make a statement before you answer that, Mr. McDonald? I was going to say that, as I understood Mr. Quelch, I do not think he was objecting, as a prairie member, to the expenditure of money in the maritimes. I think he was drawing attention—

Mr. QUELCH: If I may, Mr. Chairman, I should like to reply to Mr. Ross and say that he got entirely the wrong impression. I am not for one moment objecting to this money being spent on draining the marsh lands in Nova Scotia. I was merely trying to point out that we were heading for trouble if we spend money on areas in the west or in the east without realizing that this condition has been brought about by the farmers being unable to recover the costs of production. When Mr. Ross speaks, he wants to remember that I am a practical farmer. I have been farming in western Canada since 1908. That is something he has not done.

Mr. Ross: Yes, I have.

Mr. QUELCH: Not to the extent that I have. You have been working on other things than farming. I realize the obstacles that the farmer is up against probably far better than Mr. Ross does. Again I stress the fact that I am not objecting for a moment to this money being spent in Nova Scotia. I think it is very desirable. I am merely pointing out the danger we are heading for in opening up more farm lands at a time when we are going to have a tremendous surplus of agricultural products, unless at the same time we guarantee to the farmers in the future that they will be able to recover their costs through the prices of the farm products that they sell.

Mr. MARTIN: Mr. Chairman, it seems to me that we are at the very crux of the problem right now. As I understood Mr. Spence last week, he thought that the program should be extended to include not only the west but the rest of Canada. I think it is important that some one from the east should join with those from the maritime provinces in saying that there is much sympathy for the situation in Nova Scotia and the other maritime provinces; and that while what Mr. Quelch says may be true, if we were to proceed only on the basis that he lays down, you could not hope for much progress in the country. We have to think in wider terms or we would not progress at all.

Mr. QUELCH: You have not had much dealings with the farmer.

Mr. MARTIN: I am not belittling the importance of what you say, but I do not think that can be the proper approach. We have to think in terms of increased population in this country and expansion along that line. I just want to say that I thought it was important that Mr. McDonald should feel that there is great sympathy and an anxious desire on the part of every one here to do all that we can to help the maritime provinces as well as the rest of Canada.

Mr. MACKENZIE (*Neepawa*): Mr. Chairman and gentlemen, I should like to say something in answer to Mr. Quelch, so that the people in the rest of Canada will not believe that the west is entirely mortgaged. In speaking to the Registrar of the Land Titles Office in my home town in January, I learned that, with the amounts which are being paid off right in his district, he expects in another five years there will be no more mortgages.

The CHAIRMAN: Where is that?

Mr. MACKENZIE (*Neepawa*): That is in Neepawa, Manitoba. And, of course, it may be different in Saskatchewan and Alberta. I do not know whether the condition of the farm land has something to do with it; or, whether it is the price of wheat.

Some Hon. MEMBERS: It is the price of wheat.

Mr. MACKENZIE: The price of wheat and other things; but if anybody wants to go and look into the situation in Manitoba he will find that things are fairly prosperous. I see, judging by the latest report in that connection which I have before me, that for the last year or so the municipalities of Manitoba are indeed in a very fine position. I should dislike very much to have information get out from this committee, or to have information given to the country, that all the west is in a heavily mortgaged condition.

Mr. QUELCH: I did not say all of the west.

Mr. MACKENZIE: You said, the west.

Mr. QUELCH: When I made the statement I did, I took the figures from the report of the Bureau of Statistics, published about ten years ago, for the provinces of Alberta and Saskatchewan. I am speaking from memory now, but it was something like 72 per cent of the land which was held either under mortgage or on lease from mortgage companies. I think that is substantially correct.

Mr. MACKENZIE: Mr. Chairman, I might say that I was talking to the head of an eastern mortgage company just recently, and he said that another two years their mortgage company will have their outstanding claims all cleared up. That I think goes to show a marked improvement in the condition of the creditors. Senator Beaubien is here and he can confirm what I have said.

The CHAIRMAN: Order, gentlemen; Mr. MacNicol has the floor.

Mr. MACNICOL: I want to place myself unreservedly on record as supporting this proposal as one way of helping the people of Nova Scotia and clearing up as effectively as possible these marsh lands. I personally spent several days in making a survey of these lands, and I want to tell you that the work done by the early settlers—what were they called; oh yes, Acadians—the people who reclaimed those dykes in the first instance; they did a wonderful thing when they reclaimed those marsh lands.

The CHAIRMAN: Order, please.

Mr. MACNICOL: I have been wondering, after listening to what Mr. Hanson has said—and he has given us a comprehensive view of the economics of the situation—I have been wondering why it was that all the dykes and walls that hold the water out have been allowed to break down, as apparently they have; and why the tides are allowed to come through on to the land, and why it was that large openings were not filled in. Apparently the keeping up of the dykes and the keeping open of the ditches was not carried on; and Mr. Hanson put a question that was pertinent, and I think everybody here will be in accord with it, and with the idea of doing everything that can be done. But, if we do put the money to open up these ditches again and build up the dykes, what procedure will be followed to keep them open and to keep the dykes up? I thought it wonderful land, what I saw of it. I am talking about the marsh land just north of Mr. Black's city, Amherst; between there and Sackville. There is a vast, a wide area there. No one lives on the marsh land, as far as I could see; they live on the north side and on the south side of it. Mr. McDonald says that he has a piece of land somewhere where he had to go six miles to get to it. That would make it rather expensive farming; and it does look like splendid land and should be productive if kept up. And now, if there is an abattoir near at hand; say there were one there near the head of the marshes in Nova Scotia—an abattoir at Amherst, for instance. Nova Scotia has a rapidly growing population. Halifax to-day has a population of something over 100,000. I think we would all like to see something done about improving the condition of those marsh land farmers in Nova Scotia. There is the land there with which to do it.

The WITNESS: In reply to Mr. MacNicol, I would like to say that there are marsh areas that are being kept up very well; for instance, at Amherst Point. There is provision with respect to these marsh land improvement facilities being kept up; I think it comes under what is known as the Marsh Act. There is a scheme set up under that legislation whereby owners of the marsh land are assessed so much per acre for the upkeep of these marsh land improvements; and it can be done very well in that way. Let me give you an illustration of the value of these marsh lands to the farmers. Soon after this

last war opened an English officer who was over here from the old country was flown all over the greater part of Canada from Ontario to the coast. They were looking for a place at which to try out ammunition. This officer, as I said, was flown over territory from Quebec down east, and he came up over the Grand Pré area, which is a large expanse of territory, and he looked down upon it without having any personal knowledge of its value and said: why, there is an old pasture that will be just the spot for us, we will not have to do any clearing, we can set our guns up there and fire away. I heard about this and I went up to investigate and found that they were going to take the land. We had a meeting or two in the Grand Pré area, and when the farmers realized that there was a likelihood of their losing their hay land, the land where they produced their grain, they were very much worried and worked up over it; except the ones that were so deeply in debt or involved that they had perhaps no chance of meeting their commitments; and so we had a survey made of this area and had a valuation put on that farm land, and when this English officer found that it was going to cost them over \$100 an acre and when they saw if they set their guns up at one end of the marsh and fired at the apparent wall of the other end they were just blasting holes in dykes through which the sea would pour when the tide came in, they soon gave up the idea.

MR. CASTLEDEN: I just want to make one observation. The speaker who preceded me spoke about the importance of markets. I think that is admirable proof of the point Mr. Quelch tried to maintain, that you have to have effective markets for the products; and that improved conditions have been a direct result in the rise of the price of dairy products and more particularly in the price of beef and pork. You have a prosperous people when the price of these commodities rises above the cost of production; otherwise, they are not in a condition economically which will enable them to carry on. Coming back to this province of Nova Scotia, I hope this committee will be able to recommend that something similar to the P.F.R.A. is provided there to serve them; and if the figures given here to-day are anything like correct it would appear that a lot of land can be reclaimed and made to pay, that it can be put into production at a very low cost. I am very anxious to see people maintain the title to their own land; as much as possible being done in a co-operative way to enable them to assist themselves. I would even go so far as to suggest that in the packing business a co-operative packing organization owned and operated by the people themselves would prove to be a great help in relieving their present economic position, and would go a long way to develop that independence which one likes to see among people of this kind. I would like Mr. McDonald to state to the committee what is being done to assist in the development of co-operative enterprise among the farmers by his department there.

THE WITNESS: First, Mr. Chairman, I would like to make this perfectly clear; that I do not want to give the impression that I am here speaking only for the marsh owners in Nova Scotia. I would like for you to consider that I am also interested in the marsh owners of New Brunswick, Prince Edward Island, Quebec, and Ontario.

SOME HON. MEMBERS: That is agreed.

THE CHAIRMAN: Yes, all farmers.

THE WITNESS: Then, in answer to Mr. Castleden, I should say this: that the Provincial Department of Agriculture has been active in assisting in the establishment of co-operatives; that they view that as one of the means of helping the farmer to solve his marketing problem. At the same time, I want to state that we are not interested in organization for political purposes; that goes without saying.

MR. CASTLEDEN: I did not suggest that.

The WITNESS: No. I think it can be said—I think you can judge from what has already been said regarding the organization of poultry and hogs and in respect to other live-stock and farm products that we have tried to co-operate with the farmers; we have aided and abetted them in every way we could to get together and solve their problems; and I want to say this too, that St. Francis Xavier have done very good work in respect to developing co-operative movements through their extension department; and that applies not only to Nova Scotia, but also to New Brunswick and Prince Edward Island.

Mr. POTTIER: I would ask Mr. McDonald if he is aware of the two marsh projects that were taken on in Yarmouth county; one at Chegoggin and the other at Hubbard's Point. I think these were confined to just a few acres at each place, but I think the experiment was started three or four years ago. Has he any knowledge of what happened there? My recollection is that those schemes were conducted by the Federal Department of Agriculture.

The WITNESS: Mr. Chairman, in reply to Mr. Pottier, I can say that the federal department, through their superintendent at the experimental farm at Nappan, Mr. Baird, have been supervising that work. There has not been a great deal of money spent and they have almost achieved the impossible, the results have been marvellous; particularly in view of the small expenditure that has been made in draining the marsh area there.

Mr. POTTIER: And that would be pretty well in the nature of a scheme such as you have in mind for the other marshes?

The WITNESS: Exactly so.

Mr. HILL: I think, from the tenor of the conversation, there is a little difficulty in the minds of some of the members of the committee as to why these dykes and drains have not been kept up; and, as to whether or not they would be kept up if they were reconstructed. As some of the members of this committee perhaps know, I had something to do with the maintenance of some of these dykes in those counties of our province some years ago. At that time there was an association, about which Mr. McDonald spoke, through which each of the men were assessed in proportion to the acreage which he had in the marsh lands for the upkeep of these dykes and drains; and I have the impression that in New Brunswick the reason this was no longer carried on and the dykes and drains let go down was that after the fall in the price of farm products many of the farmers found that they could not afford to keep their assessment up. You see, these assessments were not compulsory and therefore certain of the farmers refused to pay their assessments while certain other farmers were quite prepared to keep them up, but if they made an expenditure on that account, the other people would get the benefit without contributing anything themselves. But now, what I had in mind to recommend to the committee was that this work be done by federal authority under something like the Prairie Farm Rehabilitation Act, you might call it the Canadian Farm Rehabilitation Act; that they would do this work in conjunction with the provinces and then these associations would keep up the repairs on these dykes and drains themselves. As long as such an arrangement carried on, and I do not see why it should not carry on indefinitely, they would keep up the dykes and drains, and they would assess the farmers in proportion to their holdings; and under the statute could make it compulsory for these farmers to pay the maintenance on these dykes and openings; and for that purpose I suggest it being done under what might be called a Canadian Farm Rehabilitation Act. I think something like that is done in the west where you reclaim land by irrigating it. They charge so much for the water to the farmer and they also make a charge for the maintenance of the land and installation in proper condition. The same thing could be done in connection with these marsh lands. That is what I had in mind in recommending to the committee and to the government that this be done; but once this

land were reclaimed that the maintenance be kept up and the owners be required to pay that cost, and that it could be done under a Canadian Farm Rehabilitation Act, and through these associations.

The WITNESS: Would you have it directed by the federal government?

Mr. HILL: There would be statutory provision setting up these associations and after the improvements had been put in the statute would provide for making the associations legally capable of enforcing collections. I think most of the farmers would be willing to agree to such an arrangement. The trouble heretofore has been that some of the farmers were quite willing to pay their share of maintenance while others simply neglected or refused to pay it, or could not afford to pay it; and the ones who could afford to pay and would pay did not want to see some of their neighbours who would not pay or could not afford to pay getting something at their expense. As I see it, that is the reason why these dykes and drains have been allowed to run down. I think if they are put into good condition again under some such scheme as I have just outlined that maintenance, applied with adequate authority, would not be hard to maintain. That is what I had in mind in making the recommendation I did to this committee.

The WITNESS: In a part of your suggestion, Mr. Hill, I might say that under the Marsh Act as we have it on our statute books in the province of Nova Scotia these maintenance charges are all collectible.

Mr. HILL: I understand that.

The WITNESS: And they can sell the land if necessary to get the bills paid. They could do that even with respect to keeping up a roadway on these marsh lands.

Mr. EMMERSON: Mr. Chairman, while I am not a member of this committee I do know something of the marsh situation in the province of New Brunswick. We have a Marsh Act in New Brunswick and where marsh has been reclaimed it can be done privately, with the consent of the owner of the land or, a group may come under the Act; and marsh lands, or any division of them, are divided into bodies and each body has a commissioner. There are so many commissioners elected by the marsh owners, the marsh owner voting the number of votes that he has acres; and when these bodies meet they may elect to do certain work to improve their land and keep up their drains and to maintain and rebuild dykes. Sometimes they have to change dykes because of the inroads made by the tides and the currents which may cut away a piece of the bank and the dykes have to be changed; but they do that, and that is all under their own power; and the moment it is done then the marsh land is assessed at so much an acre and if anyone does not pay his dues or his assessment then that land may be sold by the commissioner in order to pay the dues. There is no difficulty about having it maintained providing the body finds that the expenditure is within reason and within the income of the productive land; and, of course, if the farm prices be such that the farmers cannot get a decent return, there is only one thing to do, that is to let the marsh go back to the sea. I think it is quite true to say that the whole thing depends upon the farmer getting a proper return, a much better return that he has had for many years past.

Mr. PURDY: Mr. McDonald, quite a lot has been said from time to time about the number of abandoned farms in the province of Nova Scotia. Are you in a position to give the committee any information on this; perhaps as regards their location as compared with the dyke lands and the farm lands we are talking about? You have some interesting information on that. It has been spread on the record very many times.

The WITNESS: I am very glad to have this opportunity of saying that this statement about there being a great number of vacant farms has been greatly exaggerated. There really are not very many places that you could really call

farms that are vacant. The most of those so-called vacant farms are not farms in the proper sense of the word at all, they are farms where you find marginal soils, marginal land, where during the early history of the province the farmers were able to eke out a bare existence because there was some wood to be cut off in the winter time, some timber perhaps; or in many cases they did a little fishing and that helped out in enabling them to keep their families. But these are not real farms. These are only places where people existed for a time, and where I do not think the great Creator ever intended a man to make a living for any great length of time.

Mr. POTTIER: Might I ask you the number of acres that could be converted into marsh land now? For instance, I understood you to say there was something like 100,000 acres in that area adjacent to Amherst. That is just one area. How about the whole of the province of Nova Scotia? I looked into this a few years ago and I think in one district in my county (Yarmouth) there was estimated to be about 10,000 acres that could be drained and make good marsh land. Has any survey been made or any estimated repair of the number of acres that could be drained in the whole province?

The WITNESS: In reply to Mr. Pottier, Mr. Chairman, may I say that we had hoped to have had a survey made last year of all the marsh land areas in the province. Application was made to the federal department to have Mr. Russell supervise that. He has been, I understand, the head engineer employed on the reclamation work in the Canadian west; but we were unable to bring him east at that time so that I cannot definitely answer your question. But as a rough estimate I would say that there would be at least one and one-half times the area that we have mentioned in relation to Cumberland and West Moreland—perhaps something in the nature of 150,000 acres. Just there I would like to make this statement: that I do think it would be a great work if the governments could after proper survey having been made and a plan worked out give some assistance in the way of helping to reclaim these valuable marsh lands about which we have been speaking, and also some of these other marsh areas. It seems to me that if we had a large marsh area where an abattoir could be built across the mouth of a river, and where there would be a large tract of very valuable land reclaimed for the farmers of that area, it should be done. And I believe that, after all, if we are going to make farming possible we have got to do some of these things; we have got to help people to have electric light and power; we have got to see that they have running water, if possible; we have got to make farm life more enjoyable and give to the urban people of our country some of the benefits that are enjoyed by their cousins in the city.

Mr. HILL: Before I spoke about the maintenance of these tracts, I knew that these associations existed for the maintenance of approved marsh land in certain parts of the provinces of New Brunswick and Nova Scotia; but in the years that have gone these dykes and other improvements have not been kept up. Therefore, if we are now going to bring in outside funds from the federal government and the provincial government to rehabilitate these lands and rebuild these dykes and drains, I think that their maintenance should be taken out of the hands of the local associations; I will tell you why. For some years I was connected with the Public Works Department of the province of New Brunswick, and we found that these associations did not maintain their dykes. The members of these associations were all land owners, and if they had a bad year and there was some expensive construction going on with respect to maintenance they would try to get away from it; they would say, we will put that off until next year and maybe we will be in a better condition to do it; just put it off from this year to the next; and then next year comes along and they put it off again until the construction gets into such a condition that it is simply impossible for them to undertake to rebuild. Therefore, if we are going to

recommend to the federal government, or give money towards it, I think it is definitely necessary that we recommend at the same time that they undertake the maintenance, and that they assess dyke land owners, but that they take out of the hands of the land owners the question of maintenance—the owners of the land should pay for the improvement, or their upkeep, but the responsibility for maintenance should be vested in a more competent authority. Such an arrangement would not add to the burden of upkeep, and would be much better than letting your little local association carry on in the haphazard way they have been doing in past years. As well as the scheme being carried out by the federal government under what might be known as a Canadian Farm Rehabilitation Act, or under whatever scheme it is carried out, make the authority responsible for the carrying out of the project likewise responsible for maintaining it and making the necessary repairs. We must have some competent authority responsible for the maintenance of those lands once the improvements have been made, or replaced, because these individual farmers have shown by their practice during the past years that they cannot be relied upon to provide proper and adequate maintenance. Maintenance is the big item in connection with these improvements. Muskrats and other animals bore holes through dykes, the tidal waters come up and the sea washes through and very serious damage can be done if little things like that are neglected. As I see it, that is one of the most important things in connection with this whole undertaking.

Mr. CASTLEDEN: In respect to what Mr. McDonald has said about the abandoned farms in Nova Scotia, could he give us any figures or procure figures with regard to the number of people getting not more than a bare living in agriculture in Nova Scotia by comparative years; say in 1912, 1922, 1932 and 1942. Could he give us a picture as to whether or not people are leaving agriculture and going into the urban centres; or, as to whether agriculture is being maintained on a stable basis.

The WITNESS: Roughly speaking, Mr. Castleden, there has been a diminishing number of people on the farms in each succeeding census. For instance, at the present time we have about 28,000 what you would call farmers, that is probably down something like between 3,000 and 4,000 from what it was ten years ago. Of course, that does not mean that there are 3,000 or 4,000 real honest-to-goodness farms vacant; a lot of those come in in the class of small acreage or marginal land, marginal soils, where it would be difficult for a farmer to make a satisfactory living for his family.

Mr. CASTLEDEN: What about 1922 and 1912; have you any idea as to those years?

The WITNESS: It would be speaking from memory. I would prefer not to answer that unless I had the figures in front of me.

Mr. GILLIS: Mr. Chairman, with respect to exaggerating the figures on the question of abandoned farms in Nova Scotia, may I say that some members of this committee are more interesting in proving that something some one else says is wrong than they are in finding a solution to the problem. I stated, I think, off the record to one or two members of this committee that I have figures that show—and if they are wrong they are not mine—that comparing the number of farms operating and producing in Nova Scotia in 1901, with the number today, at this time there were approximately 80 per cent less farms operating and producing in Nova Scotia than there were in 1901.

The CHAIRMAN: What percentage?

Mr. GILLIS: About 80 per cent.

Mr. BLACK: Eighty per cent less?

Mr. GILLIS: Eighty per cent less. Your definition of "farm" at that time and your definition today is something I am not responsible for. As Mr. McDonald knows, a farm maintaining a family in 1901 was listed as a farm. The

unit is larger to-day. You have more modern methods. That would not be considered as a farm to-day. Nevertheless, it was maintaining a family and producing in 1901. If you take a trip in Inverness county—and I have gone through it within the last couple of years—it is nothing but abandoned houses. There may be only three, four or five acres there, but there was a family living on it back during those years, and a family was being maintained on it, and it was listed as a farm. If you go through Cape Breton county, you will get a similar situation there—vacant farm after vacant farm. You may not call it a farm to-day, but it was listed as a farm in 1901. If you go through Antigonish county, you get quite a lot of them there. In Guysboro county you have a similar situation. You may not call them farms today, but the figures that I gave were based on the situation at that time. There certainly has been a rapid decline. As to whether it is marginal land or not, I do not know. I am not a farmer, and I do not make any pretence of arguing with the Minister of Agriculture about something he knows all about.

The WITNESS: I do not know it all, no.

Mr. GILLIS: I think there is a field there that could very well be canvassed by the Department of Agriculture and a definite program mapped out with respect to the utilization of buildings and farm lands—small holdings that might be used in the aftermath of the war to re-establish soldiers on. The policy of the federal government in the field of rehabilitation and placing men back on the land, as I understand it, is that, instead of doing what they did in the last war—namely dumping them on to large holdings where they merely drifted into the hands of the mortgage companies and the bankers—where about 90 per cent of them are today—with respect to the ex-service men who are placed on the land, their policy for after this war is small holdings closely related to industry, so that it may be a seasonal thing, part time on the farm and part time in industry, and balance the community on that basis. A lot of these vacant farms in Nova Scotia have buildings on them. If they are marginal lands, that is something the department would have to take into consideration. But there is the possibility that a lot of that could be utilized on the basis that the government intends to place men back on the land. I mentioned these figures. They are not on the record. They were in conversation with members of the committee. The survey that I saw was of comparative figures for 1901 as against what it was in 1939 and 1940. If you read the Sirois Report on that whole matter, and the presentation made to the Sirois Commission, you will find the situation is not so beautiful. The imports of food stuffs in Nova Scotia amount to approximately \$12,000,000. I think there is sufficient land there, if properly organized, with people there, to perhaps offset that. We have a market there ourselves. But do not forget that your railroad companies come into this thing. I think agriculture is very much in the same position as is coal in Canada,—that it is a profitable venture for the railroads to drag stuff from the west down to the east, the same in agriculture as it is in coal. Before you get into a proper line-up and solution to the problem, you will have to tackle the railroads, the freight rates and the many other ramifications.

Mr. MARTIN: Of course, they are competing in products such as potatoes.

Mr. GILLIS: That is true. We can grow them.

Mr. MARTIN: I know. But you are competing with other parts of Canada.

Mr. GILLIS: As long as certain people have control and can route the thing so as it is profitable to themselves, that will be done unless there is an honest approach to the thing, and the interests of the farmer balanced against the interests of some who want to make money. I did not like Mr. McDonald's answer to Mr. Castleden when he asked him as to the possibilities of the utilization of a co-operative organization among the farmers themselves. He seemed to think the question was for political purposes. Well, it was not.

I was closely associated with that St. Francis Xavier movement in Nova Scotia from its inception. I took an active part in the forming of the credit union before I ever thought of politics. I have always patronized one of their stores. I do still. I have done everything I could to promote that because the final solution to the problem of the people in any sphere of life is by interesting them themselves, and the solution is within themselves. Unless you educate them to do things for themselves, there is no grandfather government going to do that for them. I think that the St. Francis Xavier extension movement in Nova Scotia has been one of the greatest contributions to the farmers of that province in the last ten years.

Mr. MARTIN: And to the fishermen.

Mr. GILLIS: And the fishermen. But we were speaking of farmers. It also applies to miners, in the field of credit unions. My conception has been that the Department of Agriculture in Nova Scotia is one department of the government which has co-operated very closely with them and worked with them; and I pay tribute to the minister for that. I think that thing could be carried still further and that movement fully utilized, particularly among the farmers and the fishermen, in the field of organization and education, in finding a solution to their problems and getting them to do things for themselves. I rose because some one mentioned these exaggerated figures. I did not exaggerate them. I do not exaggerate.

The CHAIRMAN: It was the minister who said they were exaggerated.

Mr. GILLIS: The minister said these figures were exaggerated.

The CHAIRMAN: He did not say you did it.

Mr. GILLIS: That is true; and Mr. Purdy said they are spread on the records. They are not.

Mr. PURDY: There are other records besides the House of Commons records.

Mr. GILLIS: Well, there is no record here and this is where the observation was made, sitting down with two or three men of the committee trying to work out an agenda, and I think it is a very pertinent part of the rehabilitation of Nova Scotia.

Mr. McCULLOCH: What about Inverness coal?

Mr. GILLIS: You should know all about that.

The CHAIRMAN: We are not dealing with coal at the moment.

Mr. GILLIS: My statement was more accurate than yours.

Mr. McCULLOCH: Not at all.

Mr. GILLIS: The record speaks for itself.

Mr. McCULLOCH: Yes, the record will speak for itself.

Mr. GILLIS: You should know all about Inverness coal. But we are not talking about that just now. That is another thing that has been badly handled. When it was no longer profitable to operate, it was handed back to the people.

The CHAIRMAN: I would suggest that Mr. Gillis not be interrupted but be allowed to finish.

Mr. GILLIS: I merely wanted to say that, because I think, from travelling through that province, particularly over the island of Cape Breton, that the vacant farms there are not monuments to progress. They are monuments to the fact that somebody in the past had neglected his duty. Now that we are into another war, that there are possible changes coming and we are planning to correct the mistakes of the past, I think this is one field in which there is lots of room for improvement.

The CHAIRMAN: Mr. McDonald, before you rise, may I make an announcement that fits into the discussion here. I should like members of the committee to think of it when they go back to their constituencies. The steering committee the other day decided to notify representatives from all provincial governments to attend here, and letters have gone out to the premiers of the various provinces asking them to come. We suggested that, if possible, Mr. McDonald, the maritime provinces might have representatives here during the week commencing May 3, when the house opens again, and the others at later periods. That is for the purpose of securing presentations covering the provincial economy of the various parts of Canada. In addition to that, we expect to have representatives from the two railway companies, which would give an opportunity for discussion of questions relating to transportation which have come up here this morning. We hope at the same time to have representations from co-operative associations.

Mr. MARTIN: What about labour, for instance?

The CHAIRMAN: We will have that too. But at the moment I am just dealing with the letters that have already gone out in furtherance of the steering committee's suggestion.

Mr. ISNOR: Before the minister speaks, may I say a word? I have in mind a statement made by Mr. Gillis in regard to the large number of farms which have been vacated. Would the minister, in his reply, please inform the committee as to the agricultural production during, say, the last ten years, in comparison with what it was previously, I should like to know if it has decreased or shown any increase during the past ten years.

Mr. GILLIS: Why not go back twenty years?

Mr. ISNOR: All right. Go back twenty years. I just want to see how this situation compares.

The WITNESS: Mr. Chairman, first I should like to correct a false impression that I think Mr. Gillis has, that I wished to criticize any statement that was made here to-day as being exaggerated. It was not that. It was a statement that had been made in the press, more particularly in the province of Nova Scotia on a number of occasions, that there was a large number of vacant farms. I want to say that that is not so. There is not a large number of vacant farms in the province of Nova Scotia—that is, really good farms, farms where a man could take his family and expect to make the kind of living that you and I would want to make for our families.

Following up your suggestion of small holdings, there are a lot of these farms, as Mr. Gillis will know, that are too far removed from other industry in order for them to be considered as proper places of settlement for our men when they come back. They are too much isolated. There are a few of these smaller places nearer industrial locations that possibly could be used. But as to the larger number of them, I think possibly the best solution would be to let them grow up to timber.

Along that line, we have even tried to close roads in certain districts where people are living on sub-marginal land and where they are not making a satisfactory living. We have tried to get the people to agree to allow us to move them into better districts, nearer to churches, to schools and to centres. But the human element comes in there. They do not want to make the change. They want to stay in those places, no matter how isolated they are or how poor the soil is. You have that problem. I should like to say that I think we are partly meeting the problem in connection with these small holdings where there are a number of people that are not producing their own vegetables. We are forming land use associations and giving these groups leadership in helping them to provide their own vegetables. We feel that it is going to be quite a help, after this war is over, if these people can get their own fish, and can grow their own

vegetables. They may not have as varied a diet as we would wish them to have, but at least they are not going to go hungry. We think that perhaps is going to be of some help.

In answer to Mr. Isnor's question, I should like to say that there has been an increase in production in the province of Nova Scotia over a term of years; and last year there was an increase in every agricultural product produced in Nova Scotia, with the exception of mixed grains. That was the one exception. In the Cornwallis or Annapolis area, in the fruit area, there has been some depreciation in the last two or three years, because that industry, as honourable members here know, is a war casualty and it is being treated as such by the federal government. Up until 1939 we were getting up to—and it was quite common—a 2,000,000 barrel crop of apples; that has dwindled now until we are getting only in the neighbourhood of 1,000,000 barrels or a little over. Thanks to you people for your generosity, we hope to save that industry for the future. But those apples, as honourable members know, are being processed for our armies overseas. We are in hopes that the fruit growers will be sufficiently encouraged to give proper attention to their orchards; that is, to look after their orchards so that they will not go down, so that they can be kept up for the future. The orchard industry in the province of Nova Scotia brings in about \$4,000,000 to \$5,000,000 of new money each year; that is, during normal times. Our biggest market, of course, is in England where 80 to 85 per cent of our apples are normally marketed as green fruit.

Mr. MARTIN: In his statement in chief Mr. McDonald said something which I should like him to elaborate on. This is altogether a post-war suggestion discussion, but he mentioned that he thought, as Minister of Agriculture in Nova Scotia, he had some scheme to meet the shortage of farm equipment at the moment, particularly tractors and the like and some basis of giving assistance to those who owned tractors. Would he outline that scheme?

The WITNESS: Roughly, and as briefly as I can explain it, it is this. We proposed to give a bonus of about 25 cents, to be divided on a 50-50 basis between the owners of the tractors and the farmers. We are doing this with the hope that farmers or tractor owners who might otherwise think they might not be able to get tires, might not be able to replace their tractors and would say, "Well, I had better keep my tractor for my own farm work" might be encouraged to go out and do some work in their community for other farmers who did not own tractors. We thought possibly that, by giving half of this bonus to the farmer, the farmer might be induced to plough another acre or two, if he knew that he was going to get this assistance in helping to cultivate his land. In other words, we thought it might save on labour somewhat, and at the same time do what the federal government is asking us to do, namely, increase our production.

*By Mr. McNiven:*

Q. Is that 25 cents per hour?—A. 25 cents per hour, yes.

Mr. MATTHEWS: Mr. Chairman, I have been greatly interested in this discussion, because I have known for a good many years a large part of the marsh country of which Mr. McDonald speaks. I have no hesitation in saying that the people of western Canada will be sympathetic to the plans which he has set forth here today.

Mr. Ross (Calgary East): Hear, hear.

Mr. MATTHEWS: I think also that I would endorse, without any qualification, the suggestion of Mr. Hill that after this reclamation has been effected, some steps should be taken—and I think they should be taken by the provincial government rather than by any association—to provide for the maintenance of these dykes. Otherwise, as I think it was Mr. Quelch suggested, the whole thing

might be done for nothing. This committee is primarily a committee to study the problems of rehabilitation, particularly from the standpoint of the men returning from overseas. I should like to ask Mr. McDonald to what extent the reclamation of these lands—probably not the whole 250,000 acres, because that is a large tract of land—would affect the re-establishment of the men coming back from overseas? How many extra men could you probably take care of? After all, that is our job.

Mr. MacNICOL: Just the work alone?

Mr. MATTHEWS: The work alone, and establishing them on farms afterwards.

Mr. McNIVEN: How much post-war employment?

Mr. MATTHEWS: Yes. Could you give us some idea of that?

The WITNESS: Mr. Chairman, that is a difficult question to answer. It would be only a rough estimate that I could make. But it would provide for a lot of employment after the war is over and when these boys come back.

*By Mr. Martin:*

Q. About how many men would it provide for? Could you give us an estimate in round figures?—A. With all deference, gentlemen, I am afraid it would be a guess. That is all I could give. We have not had the proper surveys to give us that information.

Mr. HILL: An engineering survey is necessary.

Mr. MATTHEWS: Just make the best guess you can. That is all we can expect.

The CHAIRMAN: A guess may not be of much help.

*By Mr. Jean:*

Q. Can you take care of your own soldiers, of your own men from Nova Scotia, who will be returning from overseas? Would that be sufficient, or to what extent would it be sufficient to take care of the men from Nova Scotia coming back from overseas after the war?—A. I would have to say "No" to that; not this work alone. I think we might as well face the facts that other industry in addition to farming has got to take its part.

Q. I mean, what proportion of your soldiers could you take care of if this suggestion were carried out. Would it be a small proportion?—A. It would be a small proportion of the men, yes. It would add a number of farms that would be all-around workable units if we could reclaim a lot of these marsh lands.

Mr. BLACK: If Mr. McDonald will allow me to interrupt, I think that point should be emphasized. Every acre of these marsh lands that could be reclaimed means that three or five acres of uplands, ordinary farm land, can be brought into profitable production which otherwise cannot be operated.

The WITNESS: Yes.

Mr. BLACK: I think Mr. McDonald would agree, that there would be three to five acres that could be brought into profitable production for every acre of these marsh lands that can be reclaimed.

The WITNESS: That is right. Just as in the case of Grand Pre, if those English officers had succeeded in getting the Grand Pre dykes, it would have taken all that farm area there; it would have given them a district where they could make a satisfactory living without the marsh areas.

Mr. BLACK: That is very true.

Mr. MACNICOL: Suppose we voted \$200,000 to assist in reclaiming these marshes. Eighty per cent of that would be labour. That would be \$160,000. At an average of \$3 a day per man, that would be 350 men for 150 days, as a start.

The WITNESS: It is difficult for us to say without some surveys of the work.

Mr. MARTIN: Mr. Chairman, Mr. Cameron was outlining this scheme to us, and I think some one ought to be engaged on this particular aspect of the problem. This is an aspect of the problem that really concerns us. I think some one should be requested to sort of work out some suggested scheme, from an engineering point of view.

The WITNESS: Speaking in the broader way, you are interested in making farm life more prosperous, are you not?

Mr. MARTIN: Yes. I do not think that would narrow it down too much.

Mr. MACNICOL: It is about one o'clock, Mr. Chairman.

The CHAIRMAN: Yes.

Mr. MACNICOL: I should like to move a vote of thanks to Mr. McDonald. Speaking as an Ontario man, I may say that I have enjoyed very much what he has said. He has been supported by Hon. Percy Black, Mr. Gillis and other maritimers, such as Mr. Pottier, Mr. Hill and Mr. Purdy, who are perhaps more familiar than any of the rest of us with the actual situation. I have had the advantage of spending some days there. I became interested firstly in making a survey as to whether the Chignecto canal could be built or not; having traversed that route I came on these marsh lands and that is how I became interested in them. But as an Ontario man, I should like Mr. McDonald to go away feeling that since we have to pay one-half of the money anyway from this province—that is a fact—the province of Ontario is at all times, Mr. Chairman, anxious and willing to help all the rest of Canada. You can go away assured that, as far as the Ontario representatives on this committee are concerned—and we speak for Ontario members, of course, here—we are behind the reclamation 100 per cent of these valuable lands. I know that, and I appreciate what has been said. We will do what we can to help you rebuild the economy of your province.

Mr. BRUNELLE: Mr. Chairman, as a member from the province of Quebec, I wish to second the vote of thanks moved by the honourable member for Davenport. Mr. McDonald has given us a very interesting lecture, and he has made a very practical presentation of a very good case for rehabilitation. Of course, he must have seen that at times there are differences of opinion between members from the east and members from the west. But he must not get the impression that we quarrel very often. We usually argue back and forth and finally there is a settlement. Mr. McDonald has made a suggestion which seems to be in the minds of every one. It is that the Prairie Farm Rehabilitation Act should be renamed the Canadian Farm Rehabilitation Act. I think this suggestion is worthwhile, and I am sure it meets with the approval of mostly every one in this committee. Again I take great pleasure in seconding the motion for a vote of thanks to the Honourable Mr. McDonald.

The CHAIRMAN: Mr. McDonald, I know that it is not necessary for me to formally put the motion that Mr. MacNicol has made, seconded by Mr. Brunelle—the one from Ontario and the other from Quebec—expressing appreciation of your presence here to-day and the statements made by you. I, as chairman, assure you that each and every member of this committee feels that you have made an excellent presentation of the case not only for the marsh lands of Nova Scotia but for the rehabilitation of agriculture in the maritime provinces generally. As practically all the members know, I personally am very anxious to get the Prairie Farm Rehabilitation Act deprived of the word "Prairie" and made to cover all of Canada.

And as to this question of the west having secured the benefits of the P.F.R.A.; I just want to tell you as a minister from the east that British Columbia although of the west does not secure any benefits of the Prairie Farm Rehabilitation Act; the west in this case means only the prairie west.

Now, Mr. McDonald, I know that the committee members would like you to say just one word in answer to my conveying to you the appreciation of this committee for what you have done for us to-day.

The WITNESS: Mr. Chairman and gentlemen: I do wish to thank you most sincerely for your vote of confidence and for giving me such a very attentive and considerate hearing. I only wish, gentlemen, that I could have done a better job.

The Committee adjourned sine die.





Gov. Doc  
Can  
Com  
R

Canada. Reconstruction and Re-establishment  
Special Committee 1943

SESSION 1943

HOUSE OF COMMONS

CA1X12

72 X 24

SPECIAL COMMITTEE

ON

# RECONSTRUCTION AND RE-ESTABLISHMENT

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 10

FRIDAY, MAY 7, 1943

WITNESS:

Mr. D. G. MacKenzie, Chief Commissioner, Board of Grain Commissioners

OTTAWA

EDMOND CLOUTIER

PRINTER TO THE KING'S MOST EXCELLENT MAJESTY

1943





## MINUTES OF PROCEEDINGS

FRIDAY, May 7, 1943.

The Special Committee on Reconstruction and Re-establishment met at 11 o'clock a.m., the Chairman, Mr. J. G. Turgeon, presiding.

*Members present:* Messrs. Bertrand (*Prescott*), Dupuis, Gillis, Hill, Jean, MacNicol, McDonald (*Pontiac*), McKinnon (*Kenora-Rainy River*), Martin, Matthews, Nielsen (Mrs.), Quelch, Turgeon.

*In attendance:* Mr. D. G. MacKenzie, Chief Commissioner, Board of Grain Commissioners.

The Chairman read a letter, dated April 20, 1943, received from Hon. J. A. McDonald, Minister of Agriculture for the Province of Nova Scotia. A Résumé of Survey Work done on the Amherst Marshes by Officials of the Nova Scotia Department of Agriculture, which accompanied Mr. McDonald's letter, is printed as an appendix to this day's Minutes of Evidence.

The Chairman also read a letter, dated April 17, 1943, from Mr. George Spence, Director, Prairie Farm Rehabilitation, Regina, Saskatchewan.

Mr. MacKenzie was called, heard and questioned.

On motion of Mr. MacNicol:

*Resolved*,—That a vote of thanks be tendered to Mr. MacKenzie for the able and exhaustive analysis of Canadian farm conditions presented to the Committee.

The Committee adjourned to meet at the call of the Chair.

A. L. BURGESS,  
*Acting Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

May 7, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11 o'clock a.m. The Chairman, Mr. J. G. Turgeon, presided.

The CHAIRMAN: Gentlemen, as you know, we have with us this morning, Mr. D. G. MacKenzie, who is a former Minister of Agriculture in the government of Manitoba, and who presently is chairman of a subcommittee of the James' committee on reconstruction.

Mr. MARTIN: And a former member of the tariff board.

The CHAIRMAN: His subcommittee has been dealing with agriculture. He is going to give us a brief this morning on agriculture. But before I call on Mr. MacKenzie, there are one or two things I wish to say. I know you will be very pleased, and I am appreciative of it, at the presence of Senator Lambert, Chairman of the Senate Committee on Reconstruction and also a member of the MacKenzie Committee on Agriculture. We are glad to have him with us this morning.

I have here a letter from Hon. Mr. McDonald, who was a witness before us a few meetings ago. It is not long and I am going to read it to you.

It reads as follows:

Nova Scotia  
Office of the Minister  
Department of Agriculture and Marketing,

HALIFAX, April 20, 1943.

Mr. J. G. Turgeon, Chairman,  
Reconstruction and Re-Establishment Committee,  
House of Commons,  
Ottawa, Canada.

Dear Mr. TURGEON:

I wish to take this opportunity of extending my sincere thanks to you and the members of your committee for the very kind and considerate reception extended to me when I had the pleasure of meeting you and your colleagues at Ottawa last Tuesday.

As I have reported to the Nova Scotia Provincial Government and to others with whom I have talked since returning from Ottawa, I feel that you and your Committee on Reconstruction and Re-Establishment is organized to do a most effective and satisfactory work. Your members are greatly interested and your committee is in a position to make recommendations which will go very far in meeting some of the most trying problems with which we will be faced in the rehabilitation period. I only wish that I could have had the time to have mentioned another matter which seems to me to be very important and which I wish you and your colleagues to give some thought to at a future meeting or meetings of your committee.

This has to do with the organizing and holding of an international conference, preferably at Ottawa, to study agricultural rehabilitation problems.

I have been endeavouring for some time to learn more about the agricultural policy of Russia and frankly I have to admit that I have been unable to get very much material on this. We feel that much can be learned from Russia and some others who are our allies in this great conflict and it is just possible that an international agricultural conference might prove of great assistance in preparing for the rehabilitation period.

I am attaching herewith a copy of a resume of survey work done on the Amherst marshes by officials of our Agricultural Engineering Department which may be helpful to you in any further study which you may care to give to this problem.

Yours very truly,

John A. McDonald.

His further brief on the Amherst marshes I am leaving with the Clerk of the Committee.

Mr. MacNICOL: Will the report enclosed in the honourable gentleman's letter be in our minutes, Mr. Chairman?

The CHAIRMAN: Yes. That is why I am giving them to the clerk. (*See Appendix A.*)

Then there is a letter from Mr. George Spence, the director of Prairie Farm Rehabilitation, who was before us and who writes in connection with a question asked by Mr. Paul Martin.

The letter is as follows:

Office of the  
Director

Prairie Farm  
Rehabilitation

#### DEPARTMENT OF AGRICULTURE

McCallum Hill Building,  
REGINA, SASK.,

April 17, 1943.

J. G. TURGEON, M.P.,  
House of Commons,  
Ottawa, Canada.

Dear Mr. TURGEON:

I am taking the first convenient opportunity to forward to you the information asked for by Mr. Martin during the hearing on P.F.R.A. projects—Large Water Development—in reference to man hours or man days labour. In checking over the question I note he asks for a "rough estimate" and it will be understood, therefore, that the following estimate is based on that basis.

The programme submitted to the committee would amount to 111,300,000 man hours actually expended on the job, which works out at 11,130,000 man days. Shortly stated, approximately the whole population of Canada could be employed for one day. It should be pointed out also that the 40% for materials would also involve labour. Using the words "rough estimate" again, I think perhaps 80% of the 40% could be considered labour costs.

Kindly transmit to Mr. Martin the information as submitted.

Yours sincerely,

GEORGE SPENCE,  
*Director of Rehabilitation.*

As you know, we have invited the premiers of the various provinces to appear before us. We suggested that they might start this week, but none of them are ready yet. They want more time, with the possible exception of Manitoba; it is possible that the premier of Manitoba will be able to appear before us if we wish it, on either Thursday or Friday of next week. I do not know for sure about that, but I am expecting a telegram from him. I think that covers the preliminaries, and I hope you will excuse the chairman for taking up so much time.

I will now call on Mr. MacKenzie.

Mr. D. G. MacKENZIE, Chairman, Board of Grain Commissioners, Fort William, Ontario, called:

The WITNESS: Mr. Chairman, ladies and gentlemen, may I preface what I have to say to you this morning simply by indicating to you that the subcommittee on post-war agricultural reconstruction has not in any sense attempted to finalize its studies yet and have not come to conclusions; therefore any opinions that I express here must be regarded as representing my own views, at the moment at least. In preparing this, I have first sought to indicate to you the approach that our subcommittee is making to the problem. Then I am going to deal with several phases of the agricultural situation, hoping that in so doing I can bring to you at least a broad survey of the factors entering into the agricultural problem in Canada to-day. I might just also say that in the preparation of my memorandum I have dealt with it as a series of sections, not knowing just exactly how you desired the matter should be presented to you. I will confess at once that at least I should like to get through the memorandum to-day; but if, after having read any one or all of the various sections, you care to ask questions and I can give you any additional information, I should be glad to do so.

The CHAIRMAN: May I say right here something that I should have mentioned before. Mr. MacKenzie and I talked over that feature of his presentation the other night. I think it would be very wise if we asked Mr. MacKenzie to make certain that all of his brief got on our record today. Mr. MacKenzie will be back here again on the 26th of May for two or three days. I mention that because the Canadian Legion are having an affair that night in connection with the Veterans Land Settlement Act in the railway committee room, and Mr. MacKenzie is their chief speaker. We can have Mr. MacKenzie with us on that occasion to answer any questions that we might wish to ask him as a result of the brief presented by him today. I think it would be wise if we made sure of having the brief on record in this sitting.

Mr. MacNICOL: You suggest, Mr. Chairman, that we do not interrupt Mr. MacKenzie by asking questions?

The CHAIRMAN: Not until after the brief is in. That is my suggestion, if it meets with the approval of the committee.

The WITNESS: Mr. Chairman and honourable members:

The terms of reference to the subcommittee on agricultural policy of the committee on reconstruction, are as follows:—

1. To study the problems of Canadian agriculture with particular reference to—

(a) The desirability of raising the standard of living of all Canadians to a desirable nutritional level, and

(b) The probable developments in the international movement of Canadian agricultural products; and

2. To recommend to the committee on reconstruction a comprehensive programme for the rehabilitation of Canadian agriculture at the end of the present war.

You will note that these terms of reference specifically instruct that special attention should be given to measures designed to augment the domestic consumption of foodstuffs at present and in the future, with a view to improving the health of the Canadian people and also to developing to the greatest possible extent the markets available in Canada for Canadian-produced food stuffs; and to attempt to appraise the possible or probable changes in foreign demand for basic agricultural staples produced in Canada. In addition, the subcommittee was instructed to recommend to the committee on reconstruction a general and comprehensive programme for the rehabilitation of Canadian agriculture at the end of the war, such programme to envisage greater stability of operations and wider prosperity among Canadian agriculturists.

*Organizing the work of the committee:*

In undertaking the work assigned to our subcommittee it was early recognized that the problems of agriculture, in common with all problems of reconstruction, fall naturally into three main divisions.

I think, Mr. Chairman, that in Dr. James' presentation to you he has already drawn attention to them; but even at the risk of repetition, I think I will read them to you. They are as follows:—

1. Problems that vitally affect the future progress and prosperity of agriculture, the solution of which depends almost entirely upon international discussion and cooperation, such as,—

- (a) Canada's export trade.
- (b) Monetary and fiscal policies.
- (c) The whole structure of international trade and transportation.

2. Problems that lie within the field of domestic action, although depending in part for their solution on developments in other parts of the world, such as,—

- (a) The relaxing of war-time controls.
- (b) The rehabilitation of the world's agriculture.

3. Problems that are entirely domestic, the solution of which depends upon the initiative exercised in our own country, but which call for collaboration and cooperation between dominion, provincial and municipal governments, for instance,—

- (a) Employment opportunities within the dominion.
- (b) Conservation and utilization of our natural resources.
- (c) The development and regulation of our primary and secondary industries, including agriculture.

I think, Mr. Chairman, that it is needful that we should emphasize that in the whole problem of reconstruction the various governmental bodies in Canada have a contribution to make and have a responsibility that they must assume. With that in mind, our committee, in organizing itself, proceeded as follows:—

*Organizing the work of the subcommittee:*

Recognizing that agriculture is a matter in which the dominion and the provinces have concurrent jurisdiction; that in other related fields reconstruction programmes may call for enabling legislation or forms of financial assistance; and above all that provincial governments cannot make their best contribution to national post-war planning as a whole unless they are kept in touch with dominion viewpoints, the subcommittee early decided that consultation with both provincial officials and others acquainted with agriculture in all parts of the country was necessary. Consequently, a conference was held in Ottawa last June attended by the ministers of agriculture, their deputies or senior executive officers, and the deans of agriculture from our universities and agricultural

schools across Canada, for the purpose of discussing with them ways and means of collaboration and cooperation in attaining the objectives set forth in the terms of reference to this committee.

This was followed by a visit from a member of our committee who is acting as a liaison officer between the dominion and the various provinces. There is now set up in each province a committee under the chairmanship of the minister of agriculture in most provinces—however, there is some variation in the character of the provincial set-ups—which is consulting with us from time to time in respect to the needs and development of agriculture in its respective province. We feel strongly that only by such collaboration can we get a composite picture of agriculture in Canada and work constructively toward a post-war programme. We are also of the opinion that there must be a clear understanding of the respective responsibilities of dominion, provincial and municipal governments in respect to the many problems of post-war reconstruction and that nothing but good can come from close and continuous collaboration between these various governments.

Now I endeavour to set out to you agriculture's position in the economy of Canada.

#### *Agriculture's position in the economy of Canada:*

An objective approach to the position of agriculture in our post-war reconstruction problems can only be effective if based on a complete appraisal of the statistical position of agriculture in our Canadian economy. The figures I now quote to you are taken either from the preliminary 1941 census returns or from the Canada Year Book, 1942.

|  |            |
|--|------------|
| † Total population of Canada, 1941.....  | 11,506,655 |
| Classified rural.....  | 5,254,239  |
| Classified urban.....  | 6,252,416  |
| I sought to have that rural population broken down in order to determine the actual number of people on farms. |            |
| Total farm population, 1941—27.5 per cent of total population.....   | 3,163,288  |
| Total farm workers, 1941:  |            |
| Members of the family—male..   | 980,578    |
| female   | 12,746     |
|  | <hr/>      |
|  | 993,324    |
| To that must be added:   |            |
| Permanent and temporary hired help .....   | 253,298    |
|  | <hr/>      |
|  | 1,246,622  |

I think it is important that we remember that fact when we think in terms of post-war employment.

†Total capital invested in agriculture, 1940, \$4,481,715,000. That is the last year for which I could get the figure. That may be broken down into these figures:—

|  |                 |
|--|-----------------|
| Gross value of agricultural production in Canada, 1941 .....       | \$1,379,386,000 |
| Gross value of livestock production, including wool .....          | 339,208,000     |
| Gross value of milk production, including all dairy products ..... | 206,543,000     |
| Gross value of poultry production, including eggs .....            | 76,428,000      |
| †Gross value of field crops .....                                  | 647,850,000     |

*By Mr. Martin:*

Q. That is the gross value based upon a year. What year?

A. Yes. 1941. Continuing:

|   |               |
|---|---------------|
| ‡Agricultural exports to all countries, 1940: |               |
| Total agricultural and vegetable products     | \$218,263,811 |
| Total animals and animal products . . . .     | 164,723,794   |

|                                      |               |
|--------------------------------------|---------------|
| Grand total value of above exports.. | \$382,987,605 |
|--------------------------------------|---------------|

† to † Preliminary 1941 Census Returns.

‡The Canada Year Book, 1942.

Wheat, livestock, bacon, cheese, dried milk, poultry and poultry products constitute by far the main proportion of this very substantial export.

### *Agriculture's Position in the Economy of Canada*

Detailed figures of current exports cannot now be published because of censor regulations, but Britain and our overseas allies are requiring all the food-stuffs we can get to them.

Now, with the statistical position of agriculture in our minds, we can turn to a consideration of the factors surrounding the operation and development of our agricultural industry.

The conditions affecting agriculture across Canada in relation to their post-war position are, I think, a little more difficult than those of almost any other phase of the general problem, because conditions of agriculture vary so greatly in each of the provinces. The problems of agriculture, for instance, in the province of Saskatchewan are entirely different from those in the province of Ontario. The problems in Manitoba are completely different from those in Quebec. The task, therefore, of formulating a national programme that will correlate and tend to meet the needs of agriculture in the various parts of Canada is by no means an easy one.

I would like to suggest that it would be useful if, in our efforts to formulate policy, we would think of agriculture as an industry engaged in the manufacturing of foodstuffs; an industry that has approximately 735,000 branch factories across Canada, with each factory facing problems similar to those found in all industrial enterprises. The farmer, like the manufacturer in the operation of his factory, is faced with problems of management, labour, working capital, adequate power supply, overhead costs, finance, factory efficiency, sales promotion, and markets, and it is in the examination of these that we get to the root base of our agricultural problem.

Furthermore, it would be useful to think of the agricultural industry in an all-inclusive sense,—as including the 3,163,288 people living on the land and operating as primary producers, together with those who are engaged in the processing of agricultural products such as the meat-packing industry, the grain trade, the flour and milling industry, creameries and cheese factories, and the fruit and vegetable industry; and also those engaged in the distribution and merchandising of the processed farm products. To these should be added all those engaged in servicing the industry, namely, the transportation companies, the farm machinery companies, and the manufacturers of all those commodities used and consumed on the farm. It is only by so doing that we can adequately appraise the position of our agricultural industry in the general economy of Canada and give it the consideration it must have in the formulation of post-war reconstruction programmes.

It might now be fitting if we seek to define the basic objective we hope to achieve in our post-war planning. Clause 5 of the Atlantic Charter might be taken as defining that objective. That clause reads:

We desire to bring about the fullest collaboration between all nations on the economic front, to secure for all improved labour standards, economic advancement, and social security.

In our approach to the problems of agriculture, therefore, we seek to satisfy that desire for security in the future on the part of our Canadian people, which we believe can only be ensured by the realization of an opportunity to earn for themselves a reasonable standard of living.

This brings us to the question of providing employment and raises the fundamental question as to what creates employment. What is it that makes a job? Is it not simply that the human race desires some goods or services and is willing to exchange money or something else to get those goods or services? When the market exists, production moves into action to supply demand. Therefore the basic step towards making jobs in Canada is to produce the things that can be sold. We must find ways to increase the volume of those actual physical goods, of those materials that have to be produced, hauled, transferred, stored, transported, refined, manufactured, processed, packaged, transported again, wholesaled, retailed, and delivered. All along the way these goods must be accounted for, must be inspected, handled and rehandled. That is the process that makes jobs. Upon that process of producing and handling actual physical goods depends the demand for the service activities that grow out of the wealth created and the profits made. Our whole structure of employment rests upon these actual physical goods.

Only four sources can supply these tangible materials,—the mines and forests, the sea and the soil; and by far the greatest of these is the soil. It would seem only logical, therefore, that in our post-war planning we should give primary recognition to the dependence of our whole economic structure on the successful development of these primary industries.

#### *Prices and Farm Income*

It is now interesting to note the very significant increase in total farm production occasioned during war years under the stimulus of the "Aid to Britain" campaign. Equally significant is the new emphasis placed on animal and animal products production as against cereal crop production in Canada and more particularly in western Canada.

Quoting figures from the Dominion Bureau of Statistics, the cash income from the sale of farm products in millions of dollars:

|          |         |          |       |          |         |
|----------|---------|----------|-------|----------|---------|
| 1942.... | 1,083·1 | 1936.... | 569·7 | 1930.... | 630·2   |
| 1941.... | 898·9   | 1935.... | 509·2 | 1929.... | 922·3   |
| 1940.... | 753·5   | 1934.... | 481·7 | 1928.... | 1,058·6 |
| 1939.... | 710·2   | 1933.... | 390·4 | 1927.... | 929·6   |
| 1938.... | 647·8   | 1932.... | 377·4 | 1926.... | 952·2   |
| 1937.... | 640·7   | 1931.... | 442·8 |          |         |

I had hoped to bring those figures down but I didn't have a chance to do so. I would like to quote from an article which appeared in *The Country Guide* in November, 1942. It is a publication issued in Winnipeg and has something like 185,000 subscribers from the four western provinces and western Ontario. Mr. R. D. Colquette, in treating this subject, writes as follows:

A farm is an individual, capitalistic enterprise. It has two sources of income: cash, from the sale of products; and kind, the land's direct contribution to the family living, like vegetables and meat for the table and fuel for the kitchen stove. It has certain expenses as a business, such as taxes, supplies, interest on debt, gasoline for the tractor or truck, depreciation and the like. It provides a house to live in, which is in the category, not of production, but of consumption goods, for which a fair rental should be allowed. The farm should return interest on investment, but that is not included, except where there is a mortgage, in the figures you are now going to read—if you do me the honour of

reading them. They represent net income after taking the above considerations into account and were assembled by the Canadian Federation of Agriculture.

From 1915 to 1919 the farmers of Canada, who represent roughly one-third of the population, received one-third of the national income. From 1926 to 1929 they received one-sixth of the national income. From 1930 to 1940 they received one-tenth of the national income. In 1932, the toughest of all tough years, the farmers, who constitute one-third of the people of this country, received only 5 per cent of the national income.

From 1926 to 1929 the average net income per farm in Canada was \$1,007. From 1930 to 1940 it was \$468. In the bottom of the trough, 1932, the average Canadian farmer had an income of \$198, of which \$111 was cash and \$87 in kind. He had that for himself and family to live on after the necessary business expenses of the farm had been allowed for. By 1940 it had risen to \$698, which was still only 70 per cent of the 1926-29 figures.

It may be admitted that all farmers are not good managers and some may be incompetent, but even that does not alter the fact that one-third of the people should get more than one-tenth or one-sixth of the national income. Self-respecting and competent farmers should not have to go before a Debt Adjustment Board; nor should we expect, from a long-distance point of view, that he would have to accept bonuses or hand-outs from governments for any purpose whatever. In the post-war reconstruction period we should seek to get away from such conditions as these and endeavour to maintain a parity in price between what the farmer gets for what he sells, and what the farmer pays for what he buys. It is not too much to say that the farmer is entitled to something more than the cost of production for the commodities which he produces. Agriculture cannot be made attractive to those seeking employment unless it can be restored to its historic position of self-dependence and self-respect. Markets for agricultural commodities will not in themselves be sufficient to rehabilitate agriculture. The price received by the farmer for the goods he sells must be such as will maintain a standard of living comparable to that enjoyed by the urban communities and adequate to supply himself and his family with the ordinary conveniences and comforts of life.

### *Agricultural Credit and Debt Problems*

Capital is as essential to the economic success of agriculture as it is to the success of any other productive enterprise. It is, however, but one of many factors. Abundance of capital can never take the place of opportunity or good management; in fact, the more capital invested in a mismanaged business the more certain and disastrous the failure, because no matter how advantageous the terms upon which it is secured, it is a burden upon the enterprise. Even though opportunity may be present in the form of productive capacity and available markets, the chance of success may be destroyed by attempting to pay more for the use of capital employed than the enterprise can afford. The operating experience of many of our western farmers is proof of this fact. After some forty years of operation we find that, in spite of debt-reducing legislation, a considerable number of the farmers have lost their equity in the land and have been dispossessed, while of those remaining altogether too many are there on the sufferance of their creditors. While there may have been other contributing factors, excessive interest rates in the past have been in a large measure responsible for this condition. While the investing of capital in western agriculture has hastened the development of both it and eastern industry, it might be questioned whether the western farmer would not find himself in a

better position to-day if his operating powers had been more restricted. In that case his home, however humble, would be his own instead of belonging to his creditors.

Credit extending over many years has been the foundation from which the whole question of land tenure springs and raises the many problems existing in the relationship between landlords and tenants. This whole problem of credits must therefore be viewed in the light of its effect on the question of farm ownership or the creation of farm tenancy.

In the long run, the terms upon which capital can be secured must depend primarily on opportunity and productive capacity. Nobody, however, can or should loan money to a farmer whose farm is not capable of producing a commodity for which there is a market available and only on terms which will permit the repayment of the debt. The whole question of credits is therefore tied up with that of markets and as marketing opportunities are extended, capital will become more easily available on better terms.

The man who wishes to establish himself as a farmer and has the opportunity and the qualities which give a reasonable assurance of success, is a potential producer, and as such is deserving of consideration for long-term or mortgage credit. There would seem to be a rather distinct difference between short-term credit dependent on present or actual production, and long-term credit based on future or potential production. In the past, short-term credit has been supplied mainly by the commercial banks; and mortgage credit has been drawn largely from the savings of individuals through such agencies as life insurance companies, trust companies and loan associations of various kinds, and by provincial and dominion government loan institutions.

From the foregoing it is evident that there are two main avenues of approach to the question of agricultural credit, both of which are needful of serious consideration. First, there is the question of how much agriculture can reasonably be expected to pay and the terms upon which this is to be granted; and secondly, the sources from which it can be drawn. The first is the most difficult undertaking because it is governed by such a wide and ever-changing variety of circumstances. Fundamentally, it is determined by the conditions under which agriculture operates. If it can be made to receive its fair per capita share of the national income, the problem will solve itself, as a proper proportion of capital would naturally flow to it. Until that time comes, however, other means must be used.

Before considering what form the agencies supplying the necessary credit should take, and in what manner the present over-burden of debt should be distributed, one phase of the developments of the last twenty or thirty years should be carefully examined. In the prairie provinces and indeed I think in most of the provinces, legislation has been enacted which established priority positions ahead of first mortgage securities. This legislation was in every case well-intentioned, but I am not sure that the final effect was ever adequately appraised. It can be stated that the final effect on the loaning of money secured by mortgage agreements has been definitely discouraging. The relegating of mortgage agreements to an inferior position has unquestionably tended to dry up funds available for mortgage loaning, and by lessening the security of position has also tended to increase the rate of interest demanded for such loans. Realizing how important a factor this may be, we are now endeavouring to have a survey made which will disclose the actual priority rating of first mortgage securities.

#### *Provincial Debt Adjusting Legislation*

Furthermore, while the provision for adjusting and writing down accumulated debts by provincial and federal governments has become vitally necessary because of the exigencies of the depression years, and has resulted in much needful adjustment, yet again it must be recognized that such action, no matter how

imperative the need was, has also tended to dry up the supply of private and corporate funds that might otherwise have been available as loans on farm lands secured by first mortgage agreement. This result is evidenced in the fact that practically no loaning institution has made loans in western Canada for several years on agreements of this kind; and similarly, all the provincial farm-loaning institutions have largely vacated the field. The Dominion Farm Loans Board is now the only loaning institution offering funds for investment in farm mortgages.

### *Adjustment of Debt Burden*

The total accumulated burden of debt as shown by the census of 1931 (and again I am sorry, that was the last figure I could get), indicates that one-third of the farmers in Canada were mortgaged for five years or more, in an amount of \$671,000,000. This figure was undoubtedly much below the actual amount of secured credit on farms, as all the factors entering into this sum were reported as being owned in the four western provinces and the remainder in eastern Canada; and the total amount is undoubtedly more than that.

The interest rate on the majority of existing long-term mortgages, about a dozen years ago, ranged from  $6\frac{1}{2}$  per cent to  $8\frac{1}{2}$  per cent in western Canada and from approximately 5 per cent to 7 per cent in eastern Canada.

In the subsequent years, because of the depression, it can be estimated that the situation is now a great deal worse, and the problem of reducing this total debt burden to bring it in line with an amount consistent with the productive capacity of the land, is indeed, a very difficult though important problem. In this connection we are carefully reviewing the provisions of the legislation introduced in 1939 by the Hon. Mr. Dunning, providing for a mortgage and bank. This legislation was designed to make provisions for a write-down of the indebtedness to 80 per cent of the estimated value of the property and provide loans at the rate of 5 per cent. There were, however, some desirable factors lacking, particularly in the fact that it made no provision for loans made by private individuals. I think, as most of the committee will realize, much of the mortgage loans in Ontario, for instance, are provided by private individuals rather than by corporate companies. It would seem therefore as if this legislation would need some extension before it could be made adequately to meet the needs across the whole Dominion of Canada, because in Ontario and eastern Canada much of the mortgage moneys supplied to agriculture have been provided by others than corporate loaning institutions.

A study is also to be made of the representations presented by the western provinces jointly to the dominion government a few weeks ago and a further examination will be made of the operations of the Farmers' Creditors Arrangement Act.

The problem of providing working capital or short-term loans must also receive attention. In Nova Scotia and Quebec and to a smaller extent in Manitoba and Saskatchewan the development of co-operative credit unions gives indication of a sound approach to this problem. This appears to be established principally in Quebec and it seems only reasonable to believe that this form of organization, by and among the people themselves, gives every promise of adequately meeting the situation and indeed, of eventually meeting part, at least, of the need for loans secured by mortgage agreements. I am forced to believe, therefore, that as a matter of policy consideration should be given to encouraging this form of providing moneys necessary as working capital to the farmers of Canada.

### *Markets*

We come now to a consideration of the factors limiting or restricting agricultural development. Undoubtedly the greatest of these, and the one most dependent on conditions outside of our immediate control, is that of export.

markets. The results of 3½ years of war, with the consequent export demand for all kinds of Canadian foodstuffs, has demonstrated beyond any possibility of doubt the value to agriculture of a competitive export market. Clause 4 of the Atlantic Charter, which reads:

"Having due regard for existing agreements, we will endeavour to further the enjoyment of trade and the raw materials of the world by all states, great or small, victor or vanquished,

is therefore of great significance to agriculture in Canada and the interpretation given to this clause at the Peace Conference will enormously affect the whole future of our agricultural industry. Your committee is therefore giving a great deal of attention to the whole problem of trade policy and the development of export markets. The technique employed by our trade commissioners in developing foreign trade, with particular reference to agricultural products, is also being carefully reviewed.

The 11,500,000 people in Canada cannot possibly consume even the major portion of our average annual production of wheat, which for the last five years was 312,400,000 bushels. Our average annual export supply of cattle for the years 1937 to 1941 inclusive was 179,262 head, while our exports of bacon to Great Britain for the same period show a much more rapidly increasing volume. Now I give you the figures for export of bacon:

*Bacon and Other Pork Cuts*

| Year             | Pounds      | In terms of hogs |
|------------------|-------------|------------------|
| 1937.....        | 192,058,700 | 1,600,488        |
| 1938.....        | 169,463,600 | 1,412,188        |
| 1939.....        | 186,473,000 | 1,553,941        |
| 1940.....        | 344,147,100 | 2,867,783        |
| 1941.....        | 464,614,000 | 3,871,783        |
| 1942..... (est.) | 565,000,000 | 4,708,000        |

and in 1943 the government is asking that we make available for Great Britain approximately 675,000,000 pounds.

The average export of bacon for the five years immediately before the war, 1935 to 1939 inclusive, was 165,418,220 pounds. It is at once apparent that our exports to Great Britain next year will be approximately four times as great as were the average annual shipments for the five-year period before the war. No great imagination is necessary to visualize the absolute breakdown of our live-stock industry if any substantial proportion of this market is lost to Canadian producers at any time subsequent to the declaration of peace. It seems imperative, therefore, to draw to the attention of the government, the imperative necessity of searching now for markets abroad for Canadian live stock after the cessation of hostilities. In this respect I would recommend three proposals for consideration:—

1. Extension of the present live-stock quota shipments to the United States under less restrictive conditions.
2. Negotiation of an agreement with Great Britain for continuance of a substantial proportion of Britain's bacon requirements.
3. Negotiation of an agreement with Russia (or other continental countries) for the sale, for a period of ten years after the declaration of peace, of the live stock necessary to the re-establishment of the herds of that country.

Now I come to Domestic Markets. Consideration is also being given to developing a market within Canada for agricultural products. The domestic market may conceivably attain a relatively much greater important position than is now the case if and when, after the war, there is a substantial shrinkage

in the volume of foodstuffs now shipped overseas. Dr. L. B. Pett, Director of Nutritional Services, Department of Pensions and National Health, has already completed some studies on this very important problem and is continuing to do research work for us. We have also had the finest co-operative support from the Interdepartmental Committee working with the Agricultural Supplies Board on consumption and production requirements for all main commodities for the season of 1943, and Dr. W. C. Hooper has just completed a further study for us on programmes of distribution of food by the United States Department of Agriculture, together with observations in connection with programmes of a similar kind in Canada during the post-war years. These constitute a definite step forward in the assembly of necessary statistical information.

It must be clearly recognized, however, that for purposes of assessing the post-war agricultural position of Canada and of formulating an appropriate policy therefor, extended investigation is required, particularly along two lines:—

1. The nutritional standards and consumption needs appropriate to (post-war) peace-time conditions in Canada.

Minimum nutritional standards have been considered in the studies referred to above but it is desirable to reassess these on peace-time assumptions. Moreover, peace-time additions to basic domestic requirements will be different. Present allowances are for the needs of the armed forces and commitments to Britain and certain other countries for war-time purposes. Requirements in respect to relief and rehabilitation shipments in the first stages of the reconstruction period will be substantially different.

2. Assessment of the agricultural potentialities and adjustments implied in whatever is considered the most desirable post-war production pattern.

This pattern may have to be decided on the basis of more than one set of assumptions. The projections must obviously be taken far beyond 1943. The most vital part of the post-war study needed is the indication of how far the present production pattern must be regarded as transitional or feasible for continuance under more normal circumstances. Our committee has now arranged that these additional studies should be completed within the next few months.

It should be pointed out that there is evidence that the belief commonly held, that application of better nutritional standards will not increase the total volume of food consumption and therefore not raise farm income, is refuted by present experience. The Canadian population in 1942 bought more food by weight than in any previous year but they also spent on food a larger percentage of the total money spent for goods.

This factor is additional to a consideration which is more generally conceded, that nutritionally important commodities involve usually the more remunerative types of agriculture. We cannot yet accurately measure how much can be added to the total foods' consumption in Canada. Most people may be getting enough to eat but many of them may not be eating the right things and if for no other reason than that of the health of our people, higher nutritional standards would seem to be desirable. But by changing the character of the things that people eat and by bringing about an increased consumption of the protective foods, we do create a very substantial additional market for dairy products, poultry products, fruit and vegetables, etc. The demand for these highly nutritional foods would, I believe, develop a market for a specialized form of agricultural production that in turn would bring substantial benefits to farmers living within a radius of 50, 75 or 100 miles from large urban centres but which might not help very much the farmer who is living back 150 or 200 miles from such a community.

It must be recognized, however, that before we can introduce higher nutritional standards, certain other problems must be faced, such as educating our

people to the necessary of using better nutritional foods and secondly, making it economically possible for low-income people to purchase the foods recommended. These problems require a great deal of study and public support before they can be made operative.

### *Wider Edible and Inedible Uses of Agricultural Products*

For some years now a great deal of public interest has been centred in the widening use of agricultural products as raw material for industry. Shortages of essential materials occasioned by the present great war are forcing governments and industry in many countries of the world to seek new sources of supply. In most countries of Europe, and to a very great degree in the United States, industry is turning more and more to agriculture as a source of raw material. Progress in practically all of these countries warrants us in believing that revolutionary changes are taking place and that agriculture, through adapting its production to the needs of industry and by the application of new processes, may secure enormous additional markets for its products.

Dr. W. D. McFarlane of McGill University spent some time visiting governmental research laboratories and industrial plants in the United States, and presented a very comprehensive summary and report to our committee on developments in that country. The information contained therein, together with research and experimental work now under way in Canada, encourages us to believe that there is now an opportunity to widen our whole base of agricultural production and to throw a new emphasis on the production of certain agricultural products capable of being converted into commodities and materials going into general consumption. Our studies in this direction are continuing. A few illustrations of the possibilities that appear to be capable of achievement may be of interest to the members of this committee. Before citing these, however, may I quote a few figures from the Dominion Bureau of Statistics that illustrate the degree to which even now industry in Canada is concerned with processing agricultural products.

In 1940 the total gross value of agricultural production in Canada was \$1,235,714,000. In that same year the meat-packing industry, the dairy factories, the flour and feed mills, and the fruit and vegetable processing plants in Canada purchased as raw materials from the farms of Canada a total of \$434,900,000 worth of agricultural products. By processing these raw materials they raised their value to \$625,400,000, and in the operation they employed 35,433 employees and paid out in salaries and wages \$43,990,000.

With industry presently providing a market for \$434,000,000 worth of agricultural products or approximately one-third of the total of our gross agricultural production, we are at once faced with the possibilities of developing this potential market by another fifty, one hundred or two hundred million dollars. If, through extended research, we can find ways and means of developing an additional market of these proportions for the products of our farms, we will have rendered a very valuable service to our primary industry and in so doing make it possible for agriculture and its associated industries to employ many more people and to contribute to a higher standard of living.

With the war extended to the Far East, Canadian imports of edible and drying oils have been drastically curtailed and it is now necessary for Canada to consider ways and means of producing as much of her needs as possible in this respect from our own sources of production. We have demonstrated that in many sections of the country we can successfully produce flax, sunflowers, safflower, soy beans, rope seed, etc. Sunflowers and soy beans produce very fine edible oil and research work now under way gives promising indication that a process for converting linseed oil into a satisfactory edible oil may early be expected.

It is not hard to visualize what such conversion may easily mean in the production of flax in this country. A survey of our present situation indicates definitely the need for increasing our crushing facilities so that the processing of these oil-producing crops may be completed in Canada, and preferably in close proximity to the areas of production.

The production of fibre-bearing crops is also deserving of consideration and if the war continues for another two or three years, the growing of such crops as fibre flax and hemp, etc., can easily become an important part of our production program.

One needs scarcely emphasize the enormous development in dehydrated fruits and vegetables since the war began. The saving of shipping space and transportation costs on food-stuffs moved to our Allies overseas has greatly stimulated this development. Improvements effected in the processing of this important phase of our agricultural production gives every reason for confidence that the development will be both substantial and permanent.

We have already demonstrated that excellent quality of wall-board may be produced from wheat straw and other waste materials. The field of plastics also opens up enormous possibilities. Proteins from cereal grains and from milk, etc., constitute another field for research and experimentation which give further indication of enormous developments. In this connection it is interesting to note that much of the surplus milk in the New York milk shed has, during the last few years, been converted into fabrics of various kinds for the manufacturing of felt hats and other wearing apparel.

But it may be that in the production of industrial and fuel alcohol we can look for the largest single development in the years ahead. It should be noted that in the year 1943 Canada will be converting something over 7,000,000 bushels of wheat into alcohol, while the United States in the same year anticipates using upwards of 200,000,000 bushels for the same purpose, with a strong likelihood that in the year 1944 close to 400,000,000 bushels of cereal grains will be so used.

*By Mr. MacNicol:*

Q. In Canada?—A. No, in the United States. My authority for that figure is a statement made at the annual meeting of the United States Chemurgic Council held in Chicago in April last. Continuing: Synthetic rubber is now one of the country's greatest needs. Agricultural products and petroleum are the main sources from which the butadiene is obtained for the manufacturing of synthetic rubber. It is also interesting to note the experimental work now being carried on in the United States and by the federal Department of Agriculture in Canada in the production of new rubber-producing crops, such as kok-sagyz, etc. The results already achieved are very interesting and warrant our believing that possibilities in this direction may emerge in the next few years. I would here like to quote what one eminent authority in the United States says in this regard.

The Doane Agricultural Service, the oldest and largest farm management and appraisal service in the United States, in its publication, "Little Journeys to Farm Land," says:—

If out of the welter of discussion on synthetic rubber, a few facts might be sifted, it should be quite worth while. We have kept in touch with the program because of its potential value to agriculture. We have attended the Gillette hearings and talked with Congressmen, experts and laymen. If it were possible to state a few salient facts briefly, we would say—

1. The possibility that agriculture might share in the production of farm-produced fuel and rubber during and after the war presents the most significant opportunity that the United States' farmers have ever had.

2. If out of the final program, agriculture might have 10% of the gas, and a fair share of the rubber market, then A.A.A. subsidies could be abandoned, farmers could produce at capacity, and the best possible assurance against a post-war depression would be created. This market would absorb more than our average surpluses in corn and wheat during the last five years, and in addition require the production of other crops in both the cotton and corn belt to supply the demand.

3. If agriculture can produce at capacity for both a consumptive and industrial market at fair prices, agriculture will remain prosperous. The United States never had a depression when agriculture has been prosperous.

4. Concerning alcohol and rubber we may say:—

- (a) Rubber can be produced from American agricultural products more quickly than from any other source of material.
- (b) The capital costs are about one-half as much for crop-rubber plants, as for petroleum-rubber plants.
- (c) No one knows the large-scale plant-operating cost for producing rubber by any process. According to the best estimates agricultural products appear to be fully competitive with petroleum.
- (d) The only known-to-be successful synthetic rubber plants in Europe are based on agricultural crops.

A further interesting reference is a book recently published by the Indiana Farm Bureau, Inc., Indianapolis, Indiana, written by Dr. Paul John Kolachov, Director of Research and Development, and Herman Frederick Willkie, Vice-President in charge of Production, both of Joseph E. Seagram & Sons, Inc., entitled, "Food for Thought".

I have the book here with me if anyone would like to look at it.

The significance of these great possibilities lend enormous emphasis to the need of extending our research and experimental facilities in this country. As one contemplates the success already achieved, it is not difficult to believe that there are real possibilities in the direction of widening the industrial uses for agricultural products and in so doing, finding an additional market for many millions of dollars worth of agricultural products.

The same type of research should be extended to the products of the forest and mines, etc. If, as a result of such an effort, we could convert the waste mill products in the lumbering industry into alcohol, cellulose, resin, lignin, plastics, tannins, charcoal, fibre board and masonite, etc., and develop small industries for their manufacture, in the same territory, we would not only add to the total industrial output of the country but would unquestionably find gainful employment for a very substantial number of men. Similarly there is need for extending research in our mining industry so that large mineralized areas containing complex ores might profitably be broken down and the various constituent metals made available to industry.

All this emphasizes very greatly the need for extending our research facilities in Canada and constitutes a challenge to our federal, provincial and municipal authorities, our universities, scientists, engineers, and industry. The decade ahead may be Canada's years of destiny. Through the application of sound research, enterprise and forward-looking vision, we can make them years of progress rather than years of stagnation.

#### *Land utilization:*

Perhaps no single phase of the production problems affecting agriculture deserves more attention than does that of the intelligent use of the land. Because of the widely varying character of our soil structure, soil covering, mineral content, surface contours, annual precipitation, and wind velocity, it is not wise to dogmatize too strongly on principles that can be applied with equal success

across Canada. Conservation of our agricultural resources and the fullest use of our land becomes increasingly important as the years go by and deterioration continues through wrong cultural practices and soil exploitation. It is perhaps not too much to say that many of our present problems have developed out of the fact that during the years of high immigration and rapid expansion we did not have a carefully thought-out land settlement programme based on an adequate knowledge of the productive capacity of the soil brought into production.

It would seem necessary, therefore, in planning for post-war agricultural reconstruction, that the first step taken would be a complete classification of all agricultural lands in every province, based on soil surveys. The dominion government and the western provinces particularly have such surveys well under way, while some work has been done in all the provinces. But the completion of this work is critically needful. Then, with our land classified on the basis of facts revealed in the soil surveys, intelligent plans and production programmes may proceed. Sub-marginal lands should be restricted from settlement, and only used for such purposes as are consistent with their productive capacities.

Before leaving the problem of soil surveys, it might be well to note that if the full value of such an effort is to be attained and lands properly classified, the surveys of soils men, forestry officers, water development engineers, economists, and others will be called into service and must therefore be well organized and effectively co-ordinated.

Coincident with these studies, plans should be developed for the maximum use of all precipitation and water supplies. I need not amplify this suggestion further as the matter has already been very ably presented to this committee by Mr. George Spence, but I would like to say that the work now being done in the administration of the P.F.R.A. calls for the highest commendation and we strongly feel that the provisions of this Act should be made applicable to the whole agricultural area of Canada.

Practices designed to overcome the damage occasioned by water and wind erosion must be developed and consideration given to ways and means of encouraging the more general use of fertilizers so as to restore the productivity of much of our depleted farm areas.

#### *District Representatives and County Agents*

I strongly recommend that the work now being done by district representatives or county agents, working under the provincial departments of agriculture, should be so extended as to provide these services to all our farmers. Experiences in all provinces are demonstrating very definitely the value of these services. They bring to, and interpret to, our farm people the most reliable and scientific information and effective type of farm practices. A very interesting illustration of what can be done by way of expert advice and direction is to be found in the work now being done in western Canada by the Canada Colonization Association and more particularly in the success achieved in their supervision of the settlement of Sudetens at Tupper, British Columbia. Undoubtedly, with this type of direction and supervision, sympathetically given, thousands of our farm people can be assisted in more successful and efficient operation of their farms.

#### *Land Settlement*

The problems of land settlement and land utilization are closely related, and any plans for placing settlers on land must have regard for the soil condition in the area proposed and the character and capacity of the production to be undertaken.

Legislation has already been enacted, outlining the conditions under which returned soldiers will be placed on the land and I need make no comment thereon.

Without extended discussion of the problems of land settlement, it might be sufficient to suggest only a few conclusions:—

1. All land settlement should be preceded by a complete soil survey and land classification.
2. All sub-marginal lands should be eliminated from settlement and set aside for reforestation or community pastures, etc.
3. Consideration should first be given to the possibilities of thickening up the population in desirable areas rather than the extension of new settlements in less desirable districts lacking municipal, educational and social services.
4. Consideration of assistance should be given to farmers' sons desiring to take up land but who are unable without assistance to establish themselves on a farm and who might otherwise drift in to urban communities.
5. The determination of plans for replacements on farms available for sale or rent, due to the retirement of previous occupants through death, illness, infirmity of old age, lack of children to carry on and inability to secure help, etc.
6. The development of carefully thought-out plans to meet any situation that may arise after the war due to,—
  - (a) The extent to which the British government may be anxious to re-establish some of her people in the dominions and to the extent that she will be prepared and able to finance them.
  - (b) Any desire that we may have to secure immigrants who will have sufficient capital of their own to enable them to get a satisfactory start in Canada, either in agriculture or industry.
  - (c) The need to meet any demand that may come from the peoples of certain countries of Europe to secure admission to Canada.

While this is by no means an all-inclusive statement, a land settlement plan based on the recognition of the above-mentioned principles would be one which I am convinced would best serve the needs of Canada.

#### *Agricultural Vocational Training, Farm Management, and Rural Leadership*

Agriculture, by reason of the rapidly changing conditions and the continuous trend to more diversified forms of production, is steadily becoming a very complex form of industrial activity. The successful farmer must have an understanding of sound business practices. He must have a general working knowledge of carpentry and mechanics, of sound soil cultural practices, insect control and plant disease control, breeding and feeding practices, care and treatment of disease in animals, etc., etc. He must be informed on market conditions and must develop sales' capacity and generally be able to give sound direction to all his farm operations.

In our universities and high schools emphasis has largely been placed on training and equipping the students for professional careers as teachers, research workers, administrators, promoters, and advisers. The student is usually allowed to specialize in some one or two fields, such as soil science, plant science, agricultural engineering, and economics, etc. Without minimizing in any degree the usefulness of such professional training, I do think that the agriculture of to-morrow will demand that new emphasis be placed on vocational training designed to train men for the management of a farm. Vocational training must assume a greater position in our whole agricultural programme. Much is now being done by way of instruction given through the medium of the farm press, farm bulletins, radio, junior farm clubs, farm meetings and demonstrators, short courses, high schools and agricultural schools; but these, I think, must be supplemented by more intimate and complete high school and university training in the art of farm management.

In the post-war reconstruction period there will be greater need than ever for both professionally and vocationally trained men. There will undoubtedly be a changing market situation in farm crops which will necessitate a change in production and farm organization. Price levels will eventually decline and cheaper methods will have to be developed. This in turn may mean greater mechanization and will certainly mean better business methods. Some policy of soil conservation will have to be developed or there will be irreparable loss through erosion, etc. There may also be some change in the method of land tenure. These and other problems will demand the services of highly trained professional men to develop agricultural policy and give proper leadership. The farmer, to take advantage of these policies and leadership, will have to be better trained in the art, science and business of farming. To meet these problems there will be a greater need than ever, in the post-war period, for refresher courses for the older farmers and better training for the farm youth and returned soldiers in vocational schools.

If farming is to take its proper place in the national economy, farm training must not only be better but it must be more widely utilized. At present, perhaps not more than 5 per cent of the farmers have had vocational training. With changing farm conditions after the war, this should be increased to include at least the major number of our farm operators. To provide this training will require an increase in the number of vocational schools. Without now attempting to define their organization, location or curriculum, it may be desirable to suggest that the basic problems of financing will, I think, demand co-operative action between the dominion and provincial governments, the student and interested organizations. The governments might share capital costs on some basis to be agreed upon, the costs of operation to be borne by both governments supported by some charge on the student, but the student's tuition fees should be such that the average farmer could afford and be anxious to have his sons and daughters take the course. Interested institutions such as farm organizations, grain companies, packing houses, service clubs and kindred organizations should be encouraged to offer scholarships to assist capable, needy students.

With an educational background of this type, we can reasonably expect a greater measure of efficiency in farm operations, with a consequent lifting of the whole standard of agriculture and an industry competent to produce men and women capable of giving to our farm people the type of leadership that will ensure for agriculture the most progressive development program.

#### *Agriculture and immigration:*

A considerable number of our public leaders to-day are saying that Canada will experience a very heavy influx of immigrants after the war. While many may not subscribe entirely to this viewpoint, realizing the tremendous problems involved in the transfer of population from one country to another, it is possible that world conditions after the war may change many of our preconceived opinions. The whole problem is so broad and far-reaching in its application to Canadian life and to our position in world affairs as to demand of us the most careful study of all the facts and experiences arising from the background of the last forty or fifty years.

During the period of heavy immigration, from 1900 to 1912, we eagerly encouraged people to come to Canada in order to help us develop our greater undeveloped agricultural resources and to provide labour for great construction projects, such as the building of branch railway lines in western Canada. During those years no serious difficulty was experienced in finding markets for all the agricultural products produced and the rapidly increasing population engaged in primary production created a substantial demand for the products of our factories and encouraged a steadily widening expansion for the manufacturing industries of Canada.

Now our position must be appraised from an entirely new perspective. I have already indicated to you the remarkable increase in agricultural production in the last few years, even in the face of a steadily declining farm population and with approximately 200,000 individuals going from agriculture into the active services and war industry. Exports of foodstuffs are now the greatest in our history and unprecedented surpluses of wheat are now accumulated in Canada. Our present agricultural population have clearly indicated their capacity for production when markets at fair prices are available.

About eighteen months ago Canada, by reason of the world wheat position, was forced to enter into an agreement with the chief wheat-exporting countries for a division of the world market for wheat after the war is over. By the terms of that agreement we are compelled to maintain our production of wheat within the amounts specified in the contract.

Our present wheat acreage under normal climatic conditions will produce up to the maximum of the agreement. Obviously, then, so long as it is necessary to accept this principle of limited commodity markets, there is little room for expansion in wheat production. If the present scale of production is maintained, the same relative position will be met in respect to our major farm products, such as bacon and pork products, livestock, cheese, whole milk and poultry, and poultry products, unless greater markets can be assured for the products of our Canadian farms.

In the face of these conditions, we must now ask ourselves whether or not we can place more people in agriculture and maintain for them a reasonable standard of living.

It must further be remembered that no longer have we in western Canada large acreages of good wheat land available as homesteads with little cost to the settler, nor are we again likely to have any railroad construction program anywhere near the magnitude of that experienced from 1900 to 1912. The incoming settler could, during that period, work on construction during the summer months and make sufficient to keep himself for the balance of the year spent in proving up his homestead requirements. Now no such conditions prevail, and to colonize any large number of people without funds would necessarily involve heavy governmental capital investment. Such capital would have to be borrowed, either in the United States with interest and exchange subject to international considerations, or from the people of Canada who would, I think, be somewhat reluctant to supply funds for colonization purposes unless there were an assurance that the people so colonized would not, in the course of a few years, become a burden on the state through unemployment or inability to sustain themselves. It becomes pertinent, therefore, to ask how are these incoming people to be fed, clothed, and housed until the fruits of their own labours become a part of the active resources of the country?

Similarly, it is doubtful if the textile manufacturers or the boot and shoe manufacturers, or similar industries would welcome the addition of many more people to those engaged in the manufacturing of these products. They desire consumers of their products, not additional producers.

But undoubtedly Canada can support many thousands more people, and a carefully selected immigration policy should be adopted. But if agriculture, under the conditions that prevail to-day, cannot absorb many of them, where should they be placed?

A study of population trends in the United States reveals the interesting fact that it is the distributive industries that have absorbed the greatest number of people during the last two or three decades. It therefore may be that in Canada we should seek to decentralize industry and to establish in all the provinces manufacturing and distributive industries suited to the conditions of each area, always seeking to develop efficiently and well the great resources of the country. It is by so doing that we can most reasonably expect to make

it possible for more people to come to Canada and to establish for themselves reasonable standards of living, without the prospect of ultimately lowering the standard of living of our Canadian citizens or of becoming a charge on the state.

### *Farm Labour*

The question of farm labour may, even after the war, continue to be a very difficult problem. Reference has already been made to the low wage income earned on the farm, before the war period, by both the farm family and by temporary additional help. To the extent that the country achieves the desired post-war programs and provides full employment at reasonable wage levels, it may, conceivably, add to the farmer's labour problems. It is difficult at all times for the farmer to compete on an active labour market. The hours of work per day are longer, the rate of cash wages usually are lower, no compensation is allowable for injury and the opportunities for recreation or entertainment are much more restricted. I think it may be expected that if the present labour conditions in industrial enterprises are to prevail in the future, a very acute farm labour problem will have to be faced.

Already approximately 200,000 men and women have left the farms of Canada for service in the armed forces or in war industries. Many of these are becoming accustomed to a much higher cash income, shorter hours of work, improved social conditions and are, therefore, likely to be reluctant to go back to farm employment when the war is over, especially if employment elsewhere is to be found. Generally speaking, the farmer has paid a level of wages as high as is reasonably consistent with his own farm income and even then is often quite unable to compete on the labour market.

With these facts in mind attention must be given to this very important farm problem. A higher return to the farm operator will do much to overcome this problem, but something more would appear to be necessary.

As part of our post-war housing scheme, consideration should be given to assisting the farmer to provide a separate home for his hired help. This might be done by way of a loan repayable over a number of years and at a low rate of interest. The farmer could then be encouraged to supplement the cash wages paid by the free use of a cow, a few hens and a small plot of land for use as a garden. This would encourage married couples perhaps with small families to make their homes on farms and would tend to stabilize farm labour. Immigrants coming to Canada might get their start in this way, learn the customs and practices of the country and so equip themselves as to ultimately make it possible to become permanently established in this country.

Now, Mr. Chairman, I am going to quote some figures from a bulletin issued by the Department of Trade and Commerce. If you will just take those as read, I shall proceed with the analysis.

The CHAIRMAN: I was going to suggest that.

The WITNESS: Thank you.

The matter referred to is as follows:

### *Rural Housing and Farm Home Equipment*

I desire now to bring to the attention of your Committee a very brief analysis of a bulletin issued by the Dominion Bureau of Statistics, entitled "Housing Census of Canada, 1941", Preliminary Housing Bulletin No. 1, showing the conditions of rural housing and farm home equipment in Canada.

| Item                 | Man.   | Sask.   | Alta.   | B.C.    | Ont.    | Que.    | N.B.   | N.S.   | P.E.I.  |
|----------------------|--------|---------|---------|---------|---------|---------|--------|--------|---------|
| No. of farms.....    | 58,686 | 139,237 | 100,333 | 25,980  | 179,188 | 154,184 | 31,838 | 33,000 | 12,240  |
| <b>Housing:</b>      |        |         |         |         |         |         |        |        |         |
| Constr.—Brick ..%    | 3.6    | 1.4     | .9      | 1.2     | 27.6    | 4.7     | .7     | .6     | .6      |
| Constr.—Wood ..%     | 90.1   | 90.3    | 90.5    | 94.2    | 59.0    | 89.8    | 97.7   | 99.0   | 98.6    |
| Value—dwelling ..    | \$966  | \$938   | \$989   | \$1,173 | \$1,421 | \$1,019 | \$861  | \$953  | \$1,057 |
| Rooms—dwelling ..%   | 4.6    | 4.2     | 4.1     | 4.6     | 7.0     | 6.2     | 6.8    | 7.2    | 7.3     |
| Persons—dwelling. %  | 4.7    | 4.4     | 4.3     | 3.8     | 4.2     | 6.0     | 5.5    | 4.6    | 4.8     |
| <b>Heating:</b>      |        |         |         |         |         |         |        |        |         |
| Heating—stove ..%    | 81.4   | 87.7    | 87.7    | 90.8    | 81.0    | 89.6    | 90.2   | 85.7   | 90.0    |
| Heating—furnace%     | 16.0   | 10.3    | 10.6    | 7.5     | 16.7    | 8.6     | 9.0    | 12.9   | 7.0     |
| Fuel—wood .....      | 86.9   | 63.0    | 57.0    | 94.7    | 75.5    | 96.1    | 98.3   | 90.2   | 88.1    |
| Fuel—coal .....      | 12.1   | 35.8    | 42.0    | 2.4     | 19.7    | 2.5     | 1.0    | 8.7    | 10.9    |
| <b>Conveniences:</b> |        |         |         |         |         |         |        |        |         |
| Electric lgt. ....%  | 7.3    | 4.8     | 5.5     | 36.0    | 37.3    | 23.6    | 18.6   | 26.2   | 5.5     |
| B.R. facilities....% | 3.2    | 3.7     | 4.3     | 23.5    | 10.7    | 6.8     | 7.0    | 9.6    | 5.5     |
| Flush toilet.....%   | 1.2    | 1.0     | 2.5     | 20.5    | 9.5     | 16.5    | 8.0    | 8.7    | 5.7     |
| <b>Equipment:</b>    |        |         |         |         |         |         |        |        |         |
| Radio .....          | 66.8   | 71.5    | 72.9    | 69.3    | 66.3    | 36.4    | 48.6   | 58.7   | 53.0    |
| Refrigerator .....   | 25.1   | 19.1    | 17.7    | 20.6    | 22.1    | 26.6    | 18.8   | 26.5   | 22.5    |
| Automobile .....     | 48.6   | 45.0    | 46.7    | 35.4    | 69.6    | 16.4    | 27.3   | 29.6   | 30.2    |
| Telephone .....      | 24.1   | 32.2    | 18.1    | 19.2    | 50.8    | 13.8    | 16.0   | 25.8   | 17.1    |
| Vacuum cleaner...%   | 1.7    | .9      | 1.9     | 10.0    | 11.1    | 1.2     | 2.6    | 4.6    | 1.2     |

The WITNESS: Continuing—

### *Rural Housing and Farm Home Equipment*

Comparing the longer settled eastern provinces with those of western Canada, farm homes and farm families in the former tend to be larger, the farm house better equipped and longer in possession of the present occupant, and in the central provinces, at least, more valuable.

In 1941 Canadian farm houses were almost all single dwellings. Over 90 per cent of them were constructed of wood, excepting in Ontario where the proportion was 59 per cent. The average number of rooms in farm homes was the greatest in the maritimes, centring around seven, and least in the prairie provinces where it averaged between four and five. The number of persons per dwelling ranged from 3.8 in British Columbia to 6 in Quebec.

In every province the farm homes in need of external repair ranged from 28.6 in Nova Scotia to 47.7 in Saskatchewan. I think that is a very modest estimate.

The estimated value of homes averaged highest in Ontario at \$1,421. It exceeded \$1,000 in Prince Edward Island, Quebec and British Columbia, and ranged down to \$938 in Saskatchewan.

### *Heating*

The number of farm homes heated by stoves runs from 81 per cent in Ontario to 91.8 per cent in British Columbia. The number heated by furnaces ranges from 7 per cent in P.E.I. to 16.7 per cent in Ontario. Wood is used as fuel in 57 per cent of the farm homes in Alberta and the percentage runs up to 98.3 in the province of New Brunswick. Coal is used to heat 1 per cent of the homes in New Brunswick and 42 per cent of the homes in Alberta. Wood likewise was the principal cooking fuel, while gas or electricity was employed in 15 per cent of Quebec and 13 per cent of Ontario farm homes.

### *Conveniences*

Electric lighting, apart from either central or private plants, was installed in more than one-third of Ontario and British Columbia farm houses but in only 4.8 per cent in Saskatchewan, 5.5 per cent in P.E.I. and Alberta, and 7.3 per cent in Manitoba.

Bathroom facilities are provided in 23.5 per cent of the farm homes in British Columbia, ranging down to 4.3 per cent in Alberta, 3.7 per cent in Saskatchewan, and 3.2 per cent in Manitoba. Similarly, flush toilets are to be found in 20.5 per cent of the farm homes in British Columbia, 2.5 per cent in Alberta, 1.2 per cent in Manitoba, and 1 per cent in Saskatchewan.

### *Equipment*

The number of farm homes with radios ranged from the low of 36.4 per cent in Quebec to a high of 79.9 per cent in Alberta.

Refrigerators were found in 26.5 per cent of the farm homes in Nova Scotia and in only 17.7 per cent of the farm homes in Alberta.

Telephones were found in 15.8 per cent of the farms in Quebec and ranged up to 50.8 per cent in the farms of Ontario.

Automobiles ranged from 16.4 per cent on Quebec farms to 69.6 per cent on Ontario farms, while vacuum cleaners were found in 11.1 per cent of the farms of Ontario, in 10 per cent in British Columbia, in 1.2 per cent in Quebec and P.E.I., in 1.9 per cent in Alberta, in 1.7 per cent in Manitoba, and .9 per cent in Saskatchewan.

### *Conclusions*

The conditions disclosed in this analysis, suggesting very substantial lack of home equipment in rural houses in contrast to the conveniences and comforts of city life, perhaps explain in some degree, at least, why so many of our younger rural people are drifting away from the farms, seeking a more comfortable and convenient style of living; and suggest the need of placing in the forefront of our reconstruction plans, provision for a carefully-conceived plan of assistance which on the one hand will enable farmers to renovate and improve their living conditions and on the other hand will permit the more general use of labour-saving devices in the farm home, thus making possible the more general enjoyment of the ordinary comforts and conveniences of urban life. Such a plan should become a very vital part of a dominion housing scheme and if organized on a self-liquidating basis can contribute enormously to the improvement of agricultural living conditions in Canada.

As part of such a national endeavour, consideration should be given to a national home beautification campaign that would have as its objective the painting of rural buildings, including those in our small rural towns, and organized on a basis that would permit the recovery of the cost in a reasonable number of years. The psychological effect of any national scheme designed to improve the home condition of our people would be enormous and would tend to make better citizens of our people by reason of their increased pride in their homes.

### *Rural Electrification*

A great deal of consideration is also being given to the possibilities of extending throughout the Dominion, electric services to farm homes and rural villages. The province of Manitoba has just completed an extensive survey of the possibilities in that province and is considering plans for the electrification of some 25,000 farm homes in a period of ten years after the close of the war. Ontario has already gone a considerable direction in electrifying much of that province. We also are studying developments in the United States where electrification of rural areas has developed very substantially in the course of the last few years. The extension of similar services to the rest of Canada would appear to be a very sound post-war project, requiring some federal financial assistance but which would in itself supply employment to a large number of men and bring many essential services to our farm homes in the form of improved living facilities and power for home appliances, including refrigeration, as well as power for the operating of much of the equipment employed on the farm, such as feed grinders, fanning mills, wood-saw equipment, milking machines, etc.

In addition, the electrification of rural areas would greatly facilitate the diversification of industry and the establishment of small manufacturing and processing plants.

### *Cultural Factors*

We believe, too, that much can be done by way of developing cultural influences among our rural people. For instance, I would like to suggest the possibility of rural communities organizing themselves on a co-operative basis, subscribing say 15 per cent of the capital cost necessary for the building of community halls, etc., the plan to be financed by the dominion government by way of a loan to be repaid in say 15 or 20 years. The local organization would be responsible for organizing various community activities, both of an educational and recreational character, promoting adult education and a finer sense of democratic citizenship. The facilities of the National Film Board of Canada and similar organizations could be used to bring to our rural people a much more complete and fuller knowledge of our country and its resources and a truer appreciation of everything that tends to the creation of an intelligent citizenship and a worth while community.

### *Transportation Costs*

Because of the geography of Canada and the fact that our trade largely moves east and west, and much of it originates thousands of miles from consuming markets, the cost of transportation weigh especially heavy on agriculture. As already suggested, much of what the farmer sells moves into the export market and has to bear the cost of hauling long distances. Similarly, the freight costs on all the commodities he has to buy becomes a charge on his production. Consequently the problem of transportation must be thoughtfully considered and costs imposed be determined, in so far as possible, so as not to bear unjustly on our farm people.

In the planning of any program of highway construction as part of our post-war reconstruction effort, due consideration should be given to the providing of better market roads for the farmers of Canada.

### *Conclusions*

The history of agricultural development in Canada since the days of Confederation, when viewed in retrospect, appears to suggest an interesting contradiction. Production has shown steady and rapid increases. For instance, from the beginning of practically nothing, seventy-five years ago, we produced last year an estimated 565,000,000 bushels of wheat. We exported close to 600,000,000 pounds of bacon. Similarly, in all branches of agricultural production we have gone from a small beginning to a very large output. It has been estimated that in 1900 three farm families produced sufficient foodstuffs to feed six families. Today, three families are producing food to feed twelve families. And this record of production has been brought about in face of a shrinkage in the total number of people engaged in farming, extending over a number of years. The explanation for this of course is obvious, mechanization and improved farm practices contributing to the result.

Now for the contradiction. This very efficiency has acted disastrously upon the farmers whose income is regulated by the price level. When an abundance of farm products is placed on the market, the surplus, which the market demand will not absorb, drives the farmer's price level lower and lower. When these prices go below the cost of production, the farmer, endeavouring to meet his obligations, allows his standard of living to drop to a subsistence level. He does with less non-family help. His wife and older members of the family take on more work. All work longer hours, paying no attention to eight-hour days, but frequently working eight hours before lunch and eight hours after lunch. And so it is this contradiction between performance and reward that is contributing to the general dissatisfaction with results obtained in the industry and to the steady transference of population from rural to urban communities.

In summing up the whole situation, let me suggest that an analysis of the statistical position of agriculture in relation to its contribution to national

income, the number of people employed, its contribution of raw material for processing industries, its contribution to the export trade, its importance as a consumer of Canadian manufacturing products, and the volume of business it supplies to transportation companies, indicates clearly its primary position in our Canadian economy. Because of this it becomes exceedingly important to give full consideration to all factors affecting its development and prosperity in the formulating of post-war reconstruction programs. It is desirable, therefore, to measure as accurately as possible present trends as to production, markets, costs, living conditions, and returns on labour and capital invested, and furthermore, to seek to determine the effect of these trends in order that we may more accurately appraise the capacity of agriculture and the associated industries to employ labour and to contribute to the maintenance of a satisfactory standard of living for our whole Canadian people.

It must be remembered that the pioneering stages of opening up large undeveloped but desirable agricultural lands are now largely past. The obtaining of profit from speculation in farm lands, as such, is now largely a matter of history, and the whole industry must now be appraised on a much wider and sounder production program and on the basis of yields and financial returns for the investment of capital and labour. With these made satisfactory, agriculture can be made to supply, directly or indirectly, gainful employment to many thousands of additional people and to establish a sound base for a more general and satisfactory advance in our whole industrial and economic structure.

Conversely, if we fail to bring about a more favourable and remunerative development of this great primary industry in our post-war operations, then once again Canada will undoubtedly face great problems of unemployment and distress and a general lowering of our standards of living.

The years ahead are Canada's years of destiny. If we plan wisely, using well the tools at hand, we can look to the future with confidence. The challenge of that planning comes to this committee and to all thoughtful citizens of this country. Ours is a great country, rich in its resources, rich in its opportunities, and rich in the foresight, planning capacity, thrift, and frugality of its people. I firmly believe that by the application of sound thinking and careful planning of the tasks ahead, we can make this Canada of ours a country worthy of our great heritage.

The CHAIRMAN: Mr. MacKenzie, I think I could tell you that every member of the committee and others who are here are deeply interested in your presentation. I am very glad to be able to tell you that Mr. Gordon Graydon, Leader of the official opposition, was in the room but not early enough for me to bring him up here to the front table. You will also be interested in knowing that the leader of the C. C. F. party was here but had to leave early.

Are there any questions any of the members would like to ask Mr. MacKenzie? There is still some time left.

Mr. MacNicol: I thought we should go one step further than just a mere handclap, Mr. Chairman; and I have much pleasure in moving a vote of thanks to Mr. MacKenzie for his very interesting, exhaustive, voluminous, and important contribution to this committee. On the last occasion on which we talked we had another remarkable contribution from the Hon. George Spence, and others who have come before the committee. To my mind the last two witnesses who have appeared before us have made exceptional presentations; by that I mean the Hon. George Spence the other day and to-day Mr. MacKenzie.

It is a little late to-day to begin asking questions. I for one, and I am sure all the other members of the assembly would also desire thoroughly to study the interesting and more than usually important information which

Mr. MacKenzie has given to us. It was intimated at the outset of to-day's proceedings that Mr. MacKenzie was coming back to Ottawa again and on that occasion I think we might well take a whole session asking questions; because every member of the committee will have had an opportunity of studying and preparing himself to ask this witness pertinent questions relating to the brief which he has to-day presented to us. I know that I, for one, will study his remarks with very great interest. I believe he has touched on very many important avenues that would be of great assistance to this committee. I hope from now on, Mr. Chairman, also, that this committee will take a lead in arriving at deductions and conclusions from the material that has been presented to us, so that we may be able to provide something to the House of Commons that will enable the government to be ready against the time of the post-war period—which may come sooner, much sooner than we think perhaps at the moment—so that they may be ready to provide jobs outlined by these gentlemen who have been here. I, for one, have been greatly encouraged and greatly pleased by Mr. MacKenzie's remarks.

The CHAIRMAN: I am glad you have said what you did, Mr. MacNicol.

Mr. MacNICOL: I intended my remarks as a motion of thanks to Mr. MacKenzie, Mr. Chairman.

The CHAIRMAN: Yes, I appreciate that. I was going to say that from Mr. Spence, as you will remember, we had a statement considering the actual production and the possibilities of greater production from the farming industry in Canada; and Mr. MacKenzie, who appears before us to-day, has dealt with the question that naturally arises in connection with increased production possibilities, the question of the possibility of increasing markets, and improving the living conditions of the farm people of Canada who are producing for us. When Mr. MacKenzie returns, along towards the end of the month, as Chairman of the committee, I would be glad, as Mr. MacNicol says, to have a whole sitting devoted to questions and answers.

In the coming week it is difficult to say just who will be before us because the people whom we are anxious to have from time to time are not sure whether they will be ready or not; but I hope that during the week we will have the co-operative societies which the steering committee started to arrange for before the recess; and possibly, as I said previously, a statement from the government of Manitoba.

If there are no further questions, a motion to adjourn will be in order. Thank you.

The committee adjourned at 12:50 o'clock p.m. sine die.

## APPENDIX A

## RESUME OF SURVEY WORK DONE IN AMHERST MARSHES

*General Information*

A complete topographical survey was made of the tidal marshes of the Amherst area in 1939. During 1940 some further work was done on gauging tides, stream flow measurements, and aboiteau discharges, and later in the same year in conjunction with an economic survey made by Dr. J. E. Lattimer, some economic aspects of the tidal marshes were given special consideration. Reports were drawn up on each of these three surveys and presented to the Nova Scotia Economic Council. Copies of these reports are on file in the office of the Agricultural Engineering Division, Nova Scotia Department of Agriculture, Truro, N.S.

*The Topographical Survey of 1940*

This survey was carried on by a party of six, using approved surveying methods similar to those used by the Dominion Hydrographic and Map Service. Main transit lines were chained with  $\approx 300$ -foot band chain and stations were located with a Gurley 6-inch transit. Elevations of all stations and important points were taken with a spirit level, a part of the time a Zeiss II being used and the remainder a K & E 5003F.

The entire survey was tied in with monuments left by the topographical survey which was made in 1935, and at important points concrete monuments with brass inserts were established. These were so located that at least one would appear on every sheet of plans prepared from the survey.

All transit stations were mapped with latitudes and departures and to a scale of 600 feet to the inch; and maps were drawn with astronomical north for meridian. On the survey the levelling was done with the standard 0.1 ft. distance in miles in mind and very frequently this standard was attained. The traverses were run with a goal of 1/5000 precision, and 90 per cent of the season's work closed within this limit. A considerable portion closed within 1/8000, and a fewer still higher.

Since there was a possible error of 5 feet in the plotting, and all traverses closed within this accuracy, it was not considered worthwhile back checking circuits with a closure having an error greater than 1/5000.

All the plans were blue printed, and the original tracings are on file with the Engineering Division.

*Data on the Marsh*

Total area surveyed, 13,170 acres.

Total length of dikes, 60 miles approx.

Average ratio length of dike/acre, 24 ft./acre.

Maximum ratio length of dike/acre, 115 ft./acre.

Elevation of low marsh, 15.5 to 19 ft. above mean sea level datum.

Elevation of English marsh, 21 to 23 ft. above mean sea level datum.

Elevation of top of dikes, 25 to 26 ft. above mean sea level datum.

Area in English hay (rough estimate only), 4,000 acres.

Area in broadleaf (rough estimate only), 8,000 acres.

Area in waste (rough estimate only), 1,000 acres.

Dimensions of dike, maximum: top, 3 ft.; base, 14 ft.; height, 7 ft; minimum: top, 2 ft.; base, 7 ft.; height, 3 ft.

Maximum cross-section of sluice in aboiteau, 42 sq. ft. approx.

Estimated drainage area for such sluice, 31 acres per sq. ft.

Minimum elevation of floor of sluice, 2.2 ft. above datum.

Minimum estimated cost of maintenance of dikes per mile per year, \$57 (dikes poor).

Minimum estimated cost of maintenance of dikes per mile per year, \$59 (dikes fair).

Maximum estimated cost of maintenance of dikes per mile per year, \$730 (badly exposed).

Average estimated cost, \$178.

Estimated cost of maintenance of dikes per acre per year, \$1 to \$4.

Cost of cleaning small ditches, 5 cents to 12 cents per brace.

Cost of cleaning large ditches, 15 cents to 25 cents per brace.

Cost of building dike, \$1.25 to \$3 per brace.

Estimated cost of building large aboiteau, \$2,500.

Estimated cost of digging new ditch, cross-section giving 1 cu.-yd. per lineal foot:—

Cost to operator of power machine at \$0.10 cu. yd., \$500 per mile.

Cost done by contractor at \$0.35 per cu. yd., \$1,750 per mile.

Cost, hand labour at \$1 per cu. yd., \$5,000 per mile.

Cost, dynamite, proper conditions, \$0.10 per cu. yd.

### *Summary of the Survey*

1. The marshes of Cumberland have seriously depreciated, the greatest change being in the past 5 or 6 years.

2. The chief problem in the operation and maintenance is diking and drainage.

3. The most suitable crop is hay, though mixed grain may be grown successfully with proper drainage.

4. Some areas are in good condition, and the owners need little outside assistance; other areas, now only partially productive, could be greatly improved by better drainage which would require some outside assistance; a few areas cannot be made productive without a large-scale project (diking, or breakwater, or main canal) which is definitely beyond the capacities of the land owners.

5. Certain areas (such as Amherst Point, and the west side of Minudie) are naturally more exposed to the sea and so are more difficult to maintain than others.

6. If reclamation is not undertaken soon large areas will be completely abandoned, or future reclamation will be much more difficult.

7. As a whole the marshes are not promising as a source of pasturage because of lack of drinking water. Certain sections, with a fair sized fresh water stream running through them, have definite possibilities.

8. Marsh lands have some disadvantages, including cost of maintenance, of dikes, etc., which do not appear on upland farms.

9. Dikes have been built by hand labour. The strength of the dike is greatly influenced by the quality of the earth, and the experience of the overseer. Further studies might show that power machines could do the work more economically.

10. All of the common drainage ditches have been dug by hand labour. Practically all of the main ditches (with the exception of special canals such as the Missiquash Canal, etc.) may be cleaned by hand labour. Some very good results, both in cleaning ditches and in repairing dikes, have been accomplished by relief labour.

11. Though certain principles apply to all the marsh lands, each body has its own special characteristics and problems.

12. The survey was conducted so as to make a compromise between covering a large area and gathering many details, and to connect the plans with

past work and to increase their future usefulness by means of permanent monuments, bearings taken from the true north, and systematic calculations, and notes.

13. There are many engineering and economic problems which have been barely mentioned or implied in this report which might be studied in detail in the future.

14. The organization of the marsh lands has been fairly satisfactory in the past. A special study by an appointed committee would be advantageous.

15. There is good evidence that the soil is naturally more suited for hay than for root crops, but also that much may be done to improve the soil by drainage, aeration and application of lime.

16. The average value of English hay may be taken as about \$9 per ton, and a yield of from 2 to 4 tons per acre, depending upon the care which the marsh received. The value of Broadleaf may be taken as \$4 or \$5 per ton, with a very variable yield, depending on the condition of the land.

### *1940 Report*

Investigation of the stream flow, aboiteau capacity, aboiteau leakage, etc., of a number of streams in the Amherst area, as well as some investigation of the dike at Grand Pre.

### *Summary*

1. Canals open to tide have special problems in silting, though the common conclusion is in favour of an open river than an aboiteau across the mouth.

2. Both the Missiquash and East Amherst marshes require a large canal for adequate drainage. The East Amherst marsh appears to be the more profitable project.

3. The Gordon Creek is giving a fair drainage of the surrounding area since it was cleaned by relief labour. The aboiteau is in good condition and quite efficient.

4. The Forrest Creek aboiteau is settling, being undermined, and the gates were not working efficiently. It is capable of delivering a large quantity of water—more than the stream can bring down to it.

5. The Grand Pre dikes are larger and more expensive to build than those in Cumberland County, but they are in good condition. The Commissioners pioneered in using a power machine for building a new dike, and had the earth removed for \$0.17 per cu. yd. (far less than the cost by old methods).

6. The Forrest Creek, Gordon Creek and creeks on the Grand Pre dike have large storage capacity, and so with a well built aboiteau can take water away from the land almost continuously.

7. The brass gates and seats used in the Grand Pre sluices are very efficient and satisfactory.

8. Based on a preliminary design for drainage canals, the cost of the Forrest Creek project is estimated at about \$10,000 (at \$2,500 per mile), the cost of the East Amherst project would be about \$25,000 (at \$3,600 per mile).

9. The benefits which would be obtained from these drainage projects, though definite, are very difficult to estimate.

10. The results of measurements and some calculated values are given in the appendix and on the blueprints.

11. The economic survey shows that the marshes are vital to the farmers in that area.

The survey was to determine the value of the marsh with respect to a number of upland areas and estimates of the cost of improving some of the areas. Summary of this and an indication of the estimates made is as follows:

### *Reclamation of Marshes*

The Economic Survey has shown that Amherst leads all the other areas studied in total income and in income from farming. If government assistance were given to improve marsh lands, one of the first questions to be answered is, "Should the good marsh land be improved to give greater returns, or should the aid be given to the areas in the greatest need?"

In the following discussion, three plans for marsh improvement are offered: One, West Amherst, which is in a fairly good condition, and which is high in the Economics Survey data; second, East Amherst, which has large areas which are nearly worthless, but the area ranks at the top in total income; third, Amherst Point, which has large areas in serious need of drainage, and which is at the bottom of the list in income, except for hay selling.

Repairs to dikes are not considered in this report. Although much of the dike is battered, the bodies are able to hold a minimum of protection. In case of serious breaks, relief labour could be used to advantage.<sup>1</sup> Only the cleaning of the main vent ditches is discussed here, because the owners cannot afford to do such a project as is required at East Amherst or Amherst Point. Privately owned marsh is not included.

*Estimates:* West Amherst and Freeman bodies estimate, using power machines, \$5,000. East Amherst, enlarging Page Canal and cleaning LaPlanche River, \$30,000. Amherst Point and Forrest Creek, \$8,000.

While no specific estimates have been drawn up for reclamation of the entire marsh area in the Amherst section, it has been roughly estimated that the cost would be in the neighbourhood of \$200,000.

### THE MARSH LANDS OF NOVA SCOTIA AND NEW BRUNSWICK

The marsh lands of these two provinces, dyked two hundred years or more ago by French Canadians and enlarged by English settlers from time to time, were for many years exceedingly productive and formed the basis of a healthy profitable beef cattle industry.

The original drainage canals put in by the marsh owners, in some cases with the co-operation of Provincial Governments, and the original dykes constructed by the marsh owners allowed the profitable farming of these areas. Hay and pasture were the two main crops thereon although at more or less regular intervals these marsh lands were ploughed and crops of grain taken therefrom and then reseeded.

As beef cattle farming became less profitable the marsh lands were gradually more and more neglected. Very little commercial fertilizer was ever used thereon but even the small quantities that were used at one time were discontinued. Barnyard manure was used more on the uplands for grain production. With the neglect in cultural practices there was, unfortunately, also an equal neglect of drainage and, on many areas, the drainage became so poor that the cultivated species of grasses disappeared and only very low grade crops of the poorer grasses and sedges remained. That is the present status of a large percentage of the marsh lands throughout these two provinces.

Meanwhile, the Experimental Farm at Nappan, N.S., undertook a systematic study of methods of marsh lands renewal as well as a study of the types of crops which could be grown thereon.

Dyke protection, obviously the first responsibility, was also undertaken in a manner such as the farmers themselves might copy. The main ditches were cleaned out and lowered. Improved types of aboiteau were erected in the dykes for the release of drainage water and lateral ditches were constructed in a

<sup>1</sup> Supplement to Report of Marsh Survey, 1939-40, p. 28.

thoroughly systematic manner. Rotations of crops were undertaken with or without the use of commercial fertilizers and farmyard manure.

The results have been amazing. Even without the use of fertilizers the rotation of crops with legumes has resulted in a tremendous increase in yields and with the use of fertilizers and manure, in not extravagant quantities, the yields are now between three and five times as great as on other average marsh lands of similar character in the Amherst and adjacent marsh areas.

This work has been carefully watched by farmers but, unfortunately, on most of these marsh lands in that section of Nova Scotia and New Brunswick the drainage systems have been allowed to get in such condition that it seems impossible for the farmers to finance this necessary reconstruction.

In the Port Williams and Grand Pre areas of marsh land along the Minas Basin the dykes have gone out and, for lack of money on the part of the marsh owners, have not been replaced. Valuable areas have thus been lost to production. There is a very active Maritime Committee on Beef Cattle Production which has been studying the question of cheaper production and improved quality of beef and invariably they have reverted to the study of the marsh lands as a basis for such improvements.

Some cattle surveys have been made by this Committee. An Illustration Station is being established in the vicinity of Sackville to demonstrate what can be done on the farmers' premises and there is a feeling of optimism amongst the members of this Committee, that if there could be some systematic marsh improvement the farmers themselves would take heart and rapidly improve their livestock both as to breeding, age, rearing and degree of finish.

Practically all of the marsh lands of Cumberland County have been surveyed as part of the soil survey along the north shore of Nova Scotia but other marsh areas in Nova Scotia and adjacent marsh areas in New Brunswick have not yet been given a soil survey. However, even though the soil surveys are not complete, action should be taken towards correcting this fundamental factor towards the reconstruction of drainage and dykes.

The Province of Nova Scotia conducted an economic survey of various areas in Cumberland County including:

- (1) West Amherst
- (2) East Amherst
- (3) Fort Lawrence
- (4) Minudie
- (5) Amherst Point (Nappan)

These studies covered, of course, the farmers' whole set-up including the uplands as well as the marsh lands. The report which is on file is an interesting study of income and the relation of marsh land to upland, etc.

The report was made by the Agricultural Engineering Division of the Nova Scotia Department of Agriculture and included certain estimates as to the cost of improving the drainage. They attempted to make these estimates of cost on the basis of using power machines and also on the basis of using hand labour. However, since labour is so scarce and machinery and a drag-line can do the work so much more satisfactorily at approximately one-quarter of the cost, the following estimates only are quoted. These on the basis of using power machines:

- |   |         |
|---|---------|
| (1) West Amherst—cost of widening and deepening the drainage creek .....                                      | \$5,000 |
| (2) East Amherst—cost of enlarging the Page Canal and cleaning the LaPlanche River using power machines ..... | 30,000  |
| (3) Amherst Point—cost of improving drainage using power machines .....                                       | 8,000   |

No estimates were made on the other two blocks of land.

Without a careful survey of all the marsh areas in these two provinces it would be very difficult indeed to make an accurate estimate of what the cost of total drainage would be but it is safe to say that a sum of \$100,000 would probably put all the main drainage canals on all the marsh lands in the two provinces in good working order. Whether or not this work should be done during wartime is, of course, a matter of Government policy but probably no one expenditure of Government money would go further towards making these two provinces much more self sustaining in meat supply with a potential surplus for export, if necessary, after the war. The dairy cattle-beef cattle ratio would adjust itself.

I think this is a perfectly legitimate Dominion-Provincial program, but I do think that the provinces should make an equal expenditure in dyke renewal and lateral ditches. I also think that the marsh owners and their association should definitely agree to plough certain areas and apply approved cultural and fertilizer practices.

E. S. ARCHIBALD,  
Director, Experimental Farms.



Gov. Doc.  
Pan  
Corn  
R

SESSION 1943

HOUSE OF COMMONS

---

( SPECIAL COMMITTEE )

ON

# RECONSTRUCTION AND RE-ESTABLISHMENT

---

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 11

---

WEDNESDAY, MAY 12, 1943

---

## WITNESSES:

Mr. W. C. Good, Paris, Ont., President, Canadian Co-operative Union.  
Mr. H. L. Fowler, Regina, Sask., Secretary, Canadian Co-operative Union.  
Rev. Dr. Coady, Director of Extension Department, St. Francis-Xavier  
University, Antigonish, N.S.

OTTAWA  
EDMOND CLOUTIER  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1943





## MINUTES OF PROCEEDINGS

WEDNESDAY, May 12, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 10.30 o'clock, a.m. Mr. J. G. Turgeon, the Chairman, presided.

The following members were present:—Messrs. Bertrand (*Prescott*), Black (*Cumberland*), Castleden, Eudes, Ferron, Gillis, Gray, Hill, Jean, MacKenzie (*Neepawa*), Mackenzie (*Vancouver Centre*), MacNicol, McDonald (*Pontiac*), McKinnon (*Kenora-Rainy River*), McNiven, Martin, Matthews, Nielsen (*Mrs.*), Poirier, Purdy, Ross (*Calgary East*), Sanderson and Turgeon. —23.

The Chairman introduced the following witnesses:—

Mr. W. C. Good, Paris, Ontario, President, Canadian Co-operative Union;

Mr. H. L. Fowler, Regina, Saskatchewan, Secretary, Canadian Co-operative Union; and

Rev. Dr. Coady, Director of Extension Department, St. Francis-Xavier University, Antigonish, Nova Scotia.

Mr. Good was called and presented a brief outlining the history of the co-operative movement. Also a brief on behalf of Mr. Keen, General Secretary of the Canadian Co-operative Union, who was unable to be present.

Witness filed with the Committee the Annual Report of the National Executive of the Co-operative Union; also a paper entitled "Suggestions for a Post-War World." The witness retired.

Mr. H. L. Fowler was called and presented a brief. He filed the following documents:—

The Co-operative Machinery Plan.

History in the Making.

The Fallacy of Profits.

A Short introduction to Consumers Co-operation.

Democracy in Action.

Report of the Special Committee of the Legislature of Saskatchewan on Farm Implement Prices.

Twenty-eighth Annual Report of the Commissioner of Co-operation and Markets, Department of Agriculture, Sask. Witness retired.

As the Chairman had to leave, Mr. McNiven, the Vice-Chairman, presided.

Dr. Coady was called, examined, and retired.

The Committee adjourned at 1.00 o'clock, p.m. to meet again Thursday, May 13, at 11.00 o'clock, a.m., when the same witnesses will be further examined.

J. P. DOYLE,  
*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

May 12, 1943.

The Special Committee on Reconstruction and Re-Establishment met this day at 10.30 a.m. The Chairman, Mr. J. G. Turgeon, presided.

The CHAIRMAN: Gentlemen, we have a quorum. To-day and to-morrow we are going to have the story of the cooperative movement in Canada. Mr. W. C. Good, a former member of this House who was here from 1921 to 1925, is the president of the Cooperative Union and has been for twenty-two years. We also have Mr. Fowler from Regina who is sitting here at the moment. He is the general manager of the Consumer Cooperative Refinery at Regina and president of the Canadian Cooperative Implement Association Limited and has been a leading figure in all cooperative movements in Western Canada. Then there is Dr. Coady whom we all know more or less as director of the Extension Department of the St. Francis Xavier University at Antigonish. Dr. Coady will be with us to-morrow and Mr. Good and Mr. Fowler to-day. I will call on Mr. Good first. All of these gentlemen are prepared to do just as the members of the committee wish, to break up their brief into two or three phases and then have questions after each or questions as they go or finish the brief first. I would suggest, in any event, that starting with Mr. Good we ask him if he would break his submission into parts and then have questions after each.

W. C. Good, called.

The WITNESS: Mr. Chairman, Mr. Minister and gentlemen: Some twenty years ago I sat here in these rooms with a good many of your predecessors in parliament wrestling with the problems of the then postwar world. It was five years after the close of the first great war. Perhaps for that reason, although we may have accomplished something, our success was not too great. Personally I am exceedingly glad that now during this second world war you are wrestling with some of the problems that will come or that are here even now but will come increasingly at the end of the war. That, I think, augurs well for the future.

Our cooperative movement throughout the world, in Canada and elsewhere, has been the subject of formal consideration by the Canadian parliament on only three occasions. The first was in 1907 when a bill was brought in having to do with the incorporation of cooperatives in Canada and very lengthy proceedings were held on that bill at which testimony was given by a number of quite prominent Canadians. Mr. Mackenzie King, the present Prime Minister, was then Deputy Minister of Labour and gave somewhat lengthy testimony. Dr. Adam Shortt, Professor of Economics at Queen's University, gave evidence on that occasion and also the then Governor General of Canada, Earl Grey, who was at that time president of the International Cooperative Alliance and very warmly interested in the cooperative movement. He gave very definite and interesting testimony. I do not know whether that was a unique occasion in Canadian history but at all events the Governor General came before a parliamentary committee to defend and explain his position and to espouse the cause of the movement which he had so much at heart.

The second occasion was seven years ago when the Royal Commission on Price Spreads sat in this building and I had the privilege of appearing before that Commission representing the cooperative movement.

To-day is the third time when this matter is formally before you. I appear before you as president of the Canadian Federation of Cooperatives. I am going to read a written statement with some interpolations and digressions, if you will pardon me for doing so. I would much prefer to speak without text but we thought it better to submit a written statement for the record and then to amplify that statement if need be in response to questions or in any other way that may seem advisable. So, Mr. Chairman, if you will permit me I will proceed with the written statement. May I say before I start to read it that my statement falls into three sections. The first section discusses the basic issues of this great world conflict.

*By Mr. MacNicol:*

Q. What?—A. The basic issues of the great world conflict. The second section deals with the cooperative movement throughout the world and in Canada under three headings, its philosophy, its history and its economics. The third section of the paper deals with the efficacy of our movement to solve some of our very pressing and distressing social and economic problems. This brief is intended to be just introductory in one sense. It is of a general character and it will be supplemented by the contributions made by Mr. Fowler and Dr. Coady later on, but will fill in what is at present more or less of a skeleton.

We approach the problems of postwar reconstruction in the midst of the fourth year of war, a war more terrible, more tragic, more portentous and significant than any conflict which history records. Nor can we see clearly what lies ahead, though we proceed with confidence in the righteousness of our cause. In respect of what is to come after the firing ceases we see but dimly. I am quite sure, however, that we cannot guide ourselves wisely in the days to come unless we understand with some clarity what has been happening.

Moreover, "it is certain," as a recent writer says, "that the postwar world will be far more the result of the war society, its institutions, its economic system, its political organization, than of any 'postwar policy.' If we wait until armistice day with our 'postwar plans' we shall be too late. It is not the grandiose schemes of the blueprinters that will determine the structure of the postwar society, but the so-called temporary emergency measures of the war—especially if the war should be a long one. They will develop into 'temporary emergency measures' of armistice and peace, and they will have become permanent before we even know it.

"The facts, institutions and beliefs of this, our present war society, will be the foundation of our postwar peace society."

That is from *The Future of Industrial Man* by Peter F. Drucker, page 292.

And Mr. Mackenzie King expressed the same thought some time ago when he said that we shall look in vain for the new world of our dreams after the war unless we are now building that world in our thoughts and policies.

It would seem, therefore, of prime importance that we should clearly understand the nature of this struggle and start now to think about, and lay the foundation of, the world after the war.

From the point of view of the united nations, the war has two aspects: We are fighting against something and we are fighting for something. What are those things?

We fight against Nazism or Fascism. And what, in reality, is Fascism and how did it come about? For a long time we in the united nations could not answer these questions, and even now not many of us can adequately do so. We may presume, I think, that those who

can give the best answers are those who were eye-witnesses of the Nazi revolution and who, by their position and their training, were competent to interpret what was going on. May I in this connection refer to three distinguished Germans, now refugees, who have given us the benefit of their views—Hermann Rauschning, Peter F. Drucker and Thomas Mann, the novelist. Rauschning, as leader in the Dantzie Senate, had numerous opportunities of intimate contact with Hitler and his associates until 1934 and has given us the record in his book "Hitler Speaks." In "The Revolution of Nihilism" he has set forth his appraisal of Fascism. Drucker in "The End of Economic Man" has made a brilliant and profound analysis of the Fascist revolution against the background of European history. These three unquestionably prophetic books were published before the outbreak of war. And Thomas Mann has not only exposed the folly and iniquity of Fascism, but has recently made an appeal to his former fellow countrymen. All this has been supplemented by various British and American diplomats and journalists who have had opportunities for first-hand observation.

It is outside my present purpose to pursue these matters further now, and I have made the foregoing references mainly to draw attention to two general conclusions. The first is that Fascism is a creed of negations. It is anti-Semitic, anti-Christian, anti-democratic, anti-liberal, anti-conservative, anti-capitalist, anti-socialist. Rauschning was certainly right when he described it, in its relatively early stages, as "The Revolution of Nihilism." And why should such a fantastic and negative creed, repudiating all the spiritual values which had underlain European civilization for 2,000 years, receive general support? Drucker answers, and his answer is the second great conclusion we should bear in mind. It is the despair of the masses, for whom life had ceased to have any meaning, and to whom the world seemed peopled by demons—many of them man-made. This feeling of despair culminated in the great depression of the 30's, with its mass unemployment, its poverty amidst plenty—nay because of plenty—its gross inequalities. Neither capitalism, socialism nor religion seemed of any avail. So, as a drowning man grasps at a straw and as the famished desert traveller sees the mirage on the horizon, the despairing masses turned to empty and contradictory promises, believed against belief, trusted in patent lies. With impassable seas behind and unscalable walls in front, people reverted to the primeval, and ran amuck.

"Totalitarianism," says Drucker, "grew out of a collapse of values, beliefs and institutions common to all western countries. And the present war is a civil war for the future of western society which cannot—except in a purely military sense—be won merely by beating off the aggressors from without. This means that the solutions lie within our own society: in the development of new institutions from the old and tried principles of freedom, in the emergence of new forms for the social organization of power, and altogether in the rethinking and re-forming of the basis of our society."\*

This quotation leads us to the other aspect of the war, namely what we are fighting for. It is, at the outset, quite obvious that it has taken some little time for the war aims of the united nations to become clarified. In such declarations as the Atlantic Charter, however, and in President Roosevelt's statement concerning the Four Freedoms, what we are fighting for has become clearer. But as yet these objectives have been stated only in general terms. As yet we have scarcely touched the question of concrete ways and means of realizing these objectives; nor is it unlikely that in this field sharp differences of opinion may increasingly develop.

\* The Future of Industrial Man, by Peter F. Drucker—p. 10.

In a practical sense, therefore, we are very far from agreement upon objectives. For this reason, therefore, as well as for reasons already set forth, such inquiries as this committee is engaged in are of the highest importance. In so far as is humanly possible, we should determine the desirable shape of things to come.

Already in Canada some valuable work has been done in this connection. I refer to the so-called "Marsh Report" which was submitted to the Canadian Parliament on March 16, 1943. In the United States also, on March 10, 1943, President Roosevelt sent a special message to congress transmitting two reports prepared by the National Resources Planning Board, and dealing in the main with a post-war programme for the United States. "We must not return," said the President in his message, "to the inequities, insecurity and fears of the past, but ought to move forward towards the promise of the future."

The fundamental objectives underlying the various recommendations made by the U.S. Planning Board are stated as follows:—

We look to and plan for:—

I. The fullest possible development of the human personality, in relation to the common good, in a framework of freedoms and rights, of justice, liberty, equality and the consent of the governed.

"As a means of protecting justice, freedom and democracy:—

II. The fullest possible development of the productive potential of all our resources, material and human, with full employment, continuity of income, equal access to minimum security and living standards, and a balance between economic stability and social adventure.

"As a means of ensuring the peaceful pursuit of life, liberty and happiness:—

III. An effective jural order of the world outlawing violence and imperialism, old or new fashioned, in international relations; and permitting and energizing the fullest development of resources and rights everywhere.

"The three factors—democracy, dynamic economy and peace—never in the history of mankind have been united in a political system. The development of a society combining these three factors means a dynamic economy with fair distribution of the resulting gains throughout the community, the organization of this economy upon the basis of democratic controls and cooperation, and the organization of a jural order of the world within which societies can live in peace and freedom.

The foregoing constitutes, I submit, a very fine and comprehensive statement of what we are fighting for.

In more general terms, our objective is the preservation and extension of the essential spiritual values of Christendom. But alas, how often has what we call western civilization failed to realize these objectives! It was the conspicuous absence of Liberty, Equality and Fraternity in 18th century France that gave rise to the passionate cry of the French Revolution; it was the conspicuous absence of freedom from want and fear in this 20th century that led President Roosevelt to enlarge the traditional freedoms by adding two new freedoms. And, as has been already pointed out, it has been the bitter experience of humanity in modern times which caused them to revolt against what seemed but empty promises and hollow mockery.

May I say, therefore, that our objectives in this war are, first, to resist the re-establishment of brute force and tyranny in human affairs and, second, to make more positive and real the nominal ideals of Christian democracy? How this latter may be best accomplished in concrete terms, is, I take it, our chief concern and most difficult problem. And the task of this delegation to-day and to-morrow is to try to show what contribution the cooperative movement can make towards this most desirable end. In other words, where and how and to what extent can cooperation solve the problems of the present and of the post-war world.

Mr. Chairman, that is the end of the first section of the report, and I pause here to ascertain your wishes.

The CHAIRMAN: It depends on the members of the committee, but I am of the opinion that you could finish another phase of your submission. Does that meet with agreement?

Some Hon. MEMBERS: Yes.

The WITNESS: Very well, I shall continue.

The cooperative movement presents itself to us under at least three different aspects, its philosophy, its history and its economics; and I should like to make brief reference to each of these.

### *Cooperative Philosophy*

Cooperative philosophy is embodied in its world-wide motto, "Each for all and all for each", and also, fittingly, in Tennyson's couplet:—

"Let each man find his own in all men's good,  
And all men work in noble brotherhood."

Cooperators believe that society is and must always be based upon the principle of mutual aid, and that the policy of "self-help in mutual association" is the key to economic progress and individual happiness. Cooperators challenge the oft-repeated statement that "Competition is the life of trade", and regard the policy of "every man for himself and the Devil take the hindmost" as defining the law of the jungle and not the law of human society.

It is, of course, true that the struggle for life with the survival of the fittest has characterized all life on this earth. But, increasingly, survival has been of groups and not of individuals; and that which determines fitness, or the ability to survive, has been the degree of cooperation prevailing within the group. The trend and significance of organic evolution are, therefore, unmistakable; and those who defend the "law of the jungle" as being salutary in human affairs have but the most superficial knowledge of Biology and Sociology.

I wonder if I might briefly digress at this point in order to refer to a very interesting book that was written by a German military man just prior to the last great war. The book was published in 1913 and was entitled, "Germany and the Next War." It was an absolutely candid defence of the law of the jungle in international relations. It is a very interesting book indeed.

Continuing:

Cooperative philosophy, therefore, stands firm and unchallenged, no matter from what standpoint it is viewed; and does not need further defence from me. I should like to say, however, before passing on, that if the United Nations had not definitely and warmly adopted the cooperative

viewpoint in their prosecution of this war, they would have had little chance of winning it; and further, that if they do not continue to be true to the cooperative motto "Each for all and all for each", they will stand a very poor chance of contributing to a just and durable peace.

At this point, Mr. Chairman, I just want to refer to a book here which was published seven years ago by a very brilliant American philosopher, Horace M. Kallen, who was the writer of a series of books. This one is entitled, "The Decline and Rise of the Consumer," a philosophy of consumer cooperation. If you want the most complete exposition of cooperative philosophy, in its relation to human history, past and present, it is in this book. It is hard reading, but it is a very fine treatment of the whole question.

Continuing:

### *Cooperative History*

The cooperative movement as we know it today is scarcely 100 years old. It is true that during part of the 18th century and the early part of the 19th century various attempts were made in line with subsequent developments; but it was not until 1844 that a real start was made. On the darkest day (Dec. 21st) of that dark year of England's history, the poor Rochdale weavers opened their poor little shop in Toad Lane. With large hopes, and still larger plans, these few poverty-stricken people kindled a fire which has spread all over the earth, and whose beneficent warmth has done much to alleviate the manifold miseries of mankind. May I point out, very briefly, some of the highlights of this remarkable development?

In Britain, from this humble beginning, at the end of 1941

Membership was 8,803,972.

Capital (share and loan) was \$1,058,493,792.

Sales were \$2,295,743,674.

Net operating surplus was \$187,882,879.

Value of productions was \$270,384,165.

(among the productive works was 51,431 acres of farm land producing food)

[See Report British Co-op. Congress 1942; also "New History of the C.W.S."]

Here is a book entitled, "The New History of the C.W.S.", by the British cooperative historian Percy Redfern, and published in 1938. Mr. Redfern published a previous history of about the same size, the "History of the C.W.S.", in 1913, just before the first great war. The new history of the C.W.S. was published just before the outbreak of this war and it is very interesting indeed to see the growth of the British movement between those two dates.

*By Mr. MacNicol:*

Q. May I ask the significance of the letters "C.W.S."?—A. Cooperative Wholesale Society. In Britain there are two great wholesale societies which engage in a lot of production as well as merchandising activities, one centered in Manchester and one in Glasgow for Scotland. I might say just in regard to the British history, that Mr. Redfern says this is one of about ninety histories of the British movement which have been written since it was established—not all of the C.W.S., but many of them of local societies. The British movement also publishes every year a book like this, the report of their annual congress, containing a lot of addresses, statistics and so on. They publish every year also "The People's Year Book", giving not only the facts about the British movement

but general matters of interest to British citizens. May I, just in passing, read you the titles of the different chapters of this Year Book: "Centenaries of 1937"; "Events of the Year"; "The British Cooperative Movement"; "Trade Unions of 1936"; "The State and the People"; "Our future population"; "The problem of nutrition"; "The economic position of Great Britain"; "Protection and the consumer"; "The League of Nations"; "Armaments in 1936"; "Russia's Constitution"; "Reviews of the Year"; "Illustrations of the Year"; "Cooperation Overseas"; "Directories".

The cooperative literature that has developed out of this little movement that started one hundred years ago is tremendously voluminous and extensive. These are just a few samples of the literature dealing with the British movement.

Now, to continue, Mr. Chairman:

In the United States, at the end of 1941, there were approximately 33,000 cooperatives, with a total membership of some 20 millions, and with a total volume of business of nearly 4 billion dollars. There is, of course, a considerable duplication in the membership figures, because many members belong to several different cooperatives. Making due allowance for overlapping, the foregoing figures indicate the very rapid growth of cooperation in the United States, practically all of this having taken place during the present century.

In Mexico and South America very incomplete statistics obtained in 1942 show a total membership of nearly 700,000.

In Canada in 1941 there were 1,395 cooperative associations, with assets of some 145 million dollars, paid up share capital of 10 millions, plant value 38 millions, and total business of 242 millions. In addition, there were 1,316 credit unions, with total assets of 31 millions. And, in addition, there are several hundred mutual fire insurance companies that are organized on democratic lines to provide service at cost. Nor should one overlook a growing number of miscellaneous types, housing, medical care, local telephone, etc., etc.

As for those Canadian cooperatives affiliated with the Cooperative Union of Canada, I submit herewith our annual report for 1941.

I have some copies here, Mr. Chairman. This is the report giving the annual report of the national executive and the statistics of the Canadian movement so far as they are linked up in one national federation. There are, however, outside of our federation in Canada, still the major number of Canadian cooperatives.

In Europe and Asia very extensive and varied cooperative activities have marked the last eighty years, which I cannot here and now even venture to enumerate. Most of these, though by no means all, are included in the International Cooperative Alliance, organized in 1895. The objects of the I.C.A. always have been, and still are, the promotion of cooperative ideals and the extension of the cooperative system throughout the world and the maintenance of good relations between all countries.

The I.C.A. reached the peak of membership and prestige in 1933, when it included the national cooperative organizations in thirty-nine countries, with a total membership of some 107,000,000.

Now, gentlemen, if you will multiply 107,000,000 by about  $3\frac{1}{2}$ , which is perhaps the average size of the family, you will get the total membership in the organized movement, of, I suppose, 350,000,000 people in the world, and outside that organized movement in the I.C.A. there are vast numbers, because in Canada, for instance, the membership of the I.C.A. is only those who are included in our own national federation. All those outside are not in the membership, but there are a lot of genuine cooperatives. The United States

is in exactly the same situation and so are other countries too. So, this is not a fair criterion of the total number of cooperators in the world who are involved in this new system. I would think it would be probably at least 500,000,000 within the space of 100 years.

After 1933 it suffered the defection of several members and just before the outbreak of the present war its membership had fallen to some 70,000,000 (with their families) grouped in some 150,000 societies in thirty-five countries. It should not be forgotten that the I.C.A. membership does not include all the cooperatives in those countries that are nominally affiliated.

Since 1939, of course, most European cooperatives have been suppressed by the Nazis, and, until freedom is reestablished, the I.C.A. membership and activities are much reduced. It maintained itself intact, however, during the war of 1914-18, and still functions as best it can under the circumstances. After this war there seems no reason why the I.C.A., a real league of peoples, should not be revived in almost full strength.

That is the end of that subsection on cooperative history, Mr. Chairman, and may I just refer to this book, which is a report of the commission sent by President Roosevelt to study the European cooperatives in the year 1937. It is an intensely full and comprehensive report by six people who went over and spent some months in all European countries. This book is in the library down here. I have to take these books back and I cannot put them in, therefore, as an exhibit, but this is a standard book of reference and was published in 1937, six years ago. Any of you who wish to get the American slant on the European continental movement and the British movement will find a great deal in that book. And may I, just while I think of it, refer to a most interesting account of the new development in China, found in the book by Edgar Snow under the title of "Battle for Asia." It was published about two years ago. You will find in that lots of information on the industrial cooperatives of China. Shall I proceed?

The CHAIRMAN: I think so.

The WITNESS: Cooperative Economics: The first thing which needs to be said is that cooperative economic development has taken place in two fields, in that of consumer and in that of producer organizations. All people are consumers, and, therefore, all people are, at least potentially, interested in consumer cooperation. The majority of people are also producers of various utilities and are, therefore, interested, at least potentially, in producer cooperation. And, as practically all people—grown people, not children—are both consumers and producers, practically all people are interested, at least potentially, in both types of cooperatives.

There is, however, a far-reaching difference between these two types.

Consumer cooperation is based upon people's needs; and basic needs are practically the same for all people. They transcend all differences of race, language, occupation, creed or nation. Consumer cooperation has, therefore, a universal significance and supplies a basis for the harmonizing of all differences in a universal social and economic organization to meet universal and common needs.

Producer cooperation, on the other hand, is based upon people's functions, upon occupations; and obviously these are many and varied. Producers' cooperatives are designed to serve the interests of particular occupational groups. Now these interests may be served at the expense of other groups, or they may be served in harmony with, and by adding to, the interests of other groups. That is to say, producers' cooperatives may be anti-social in their attitudes and conduct, or they may be social.

May I just digress for a moment at this point to say that this problem of the coordination of producer and consumer cooperatives is an extremely intricate, interesting and important one? It has been worked out very effec-

tively in certain districts; it is being worked out on this continent where the producer co-operatives are a very large feature of the co-operative scene. I do not think it would be wise to go into what is essentially a very complicated question, although it is a very important one.

It is because of such differences that some are disposed to exclude producers' cooperatives from the category of genuine cooperatives. There are, however, so many features common to both types, and producers' cooperatives so often serve the common interest as against a special class interest, that such exclusion is, in my judgment, unwise. There need be no serious or permanent clashing of interests between the same people organized on different bases.

It is, however, very necessary to recognize the far-reaching differences between the two types, and that consumers' cooperation is alone able to supply a basis and a method for the world-wide harmonizing of conflicting economic interests.

Moreover, it is significant that the trend of cooperative development has been towards the absorption of the producer group in the larger consumer group, and the carrying on of productive functions under the direct auspices of large consumers' organizations.

In digressing again for a moment, in Britain it has been very notable, because in the early days a great many of them were what they called copartnership factories; many of these have been absorbed by the C.W.S.; some of them are still standing, so to speak, on their own feet, and they have harmonized relationship with the large consumers' movement.

How far this process may be carried on, and whether or not there are certain natural limits to it, is an interesting question, but not a matter of sufficient practical importance to justify pursuing it further here.

May I say, however, that this is a very important practical question? On this North American continent in some respects the problem of distribution of citrus fruits from producer cooperatives of California has raised some very definite practical questions. And there is an important theoretical point involved in that as a rule there is a point of optimum meeting; that is, there is a place where the two divisions of cooperatives can meet with the greatest mutual advantage. It is a very important practical question in many fields of cooperative activity on this continent. I do not go into that any further because it is a great mass of detail; perhaps some of the others will develop it later.

The second thing that needs to be said is that while most cooperators do envisage what may be called a new economic system, they do not attempt to bring it about by withdrawing from the business world as it is.

That is to say, our philosophy is not that of economic monasticism.

There is, in their opinion, much about so-called private business that is excellent and of permanent value. There are, however, in so-called private enterprise, certain trends which economic history has shown to be highly injurious to the general welfare and a menace to democracy. These mischievous tendencies have been pretty well set forth, so far as Canada is concerned, in the report of the Royal Commission on Price Spreads, 1935, and I would particularly refer this committee to chapters 2 and 3 of that report.

Briefly, it can be said that in certain large and important areas in our modern economy, private enterprise presents us with two alternatives, either competitive waste or monopoly extortion. In all large scale industry the trend toward private monopoly is conspicuous so that for several decades people have cast about for some controls. State regulation has been tried, but with indifferent success.

You have plenty of that in the United States history in the last forty years.

State industry has been tried, with somewhat better results. Take our own Hydro Electric in Ontario. Cooperative industry has been tried and I would

submit that anyone who examines the evidence must be impressed by its effectiveness. Cooperative production and distribution eliminate the wastes of unrestricted competition and at the same time check the extortions of private monopoly.

The industrial field, indeed, can be occupied by only three types of agencies, —I dislike the term, but we are always suffering under the limitation of language, you know—private enterprise, so-called, including the joint-stock corporation, the state and the cooperative group. And let no one think that the joint-stock corporation and the cooperative corporation are alike. In some respects they are alike; but in some other respects—those that affect the public welfare—they are as far apart as the poles.

As to the future cooperators, they are not doctrinaires. They are prepared to admit that some activities may better be carried on by the state, or under state auspices. They admit that some activities may better be looked after by private enterprise. They believe, however, that the field which cooperative enterprise can best fill is a very large one, as recent history has shown. They are prepared to consider and decide each case on its merits. But what they insist upon is that the cooperative motto "Each for all and all for each," shall be the guiding principle in all three fields. Cooperation is, indeed, more an attitude of mind and a way of life than an economic system, and it will help us all if we bear this in mind.

I should like to repeat that, Mr. Chairman. Cooperation is an attitude of mind, a system of ethics, if you like, but actually far more than an economic system. The system is the expression in our everyday life in our material affairs, a philosophy and system of ethics.

That is the end of the second part, Mr. Chairman.

The CHAIRMAN: Do you wish to ask any questions now? I think, if you would continue, Mr. Good.

The WITNESS:

It should be apparent from the foregoing review that the ethical and philosophical basis of cooperation is entirely in harmony with those fundamental values for which the United Nations are fighting this war; that its historic growth is impressive, if not spectacular; and that its method is reasonable, peaceful and evolutionary. My two colleagues will deal in some detail with what Cooperation has accomplished in certain parts of Canada, and I shall conclude this paper with some examination of the contribution our Movement can make to the solution of some of the major economic and social problems of modern society.

I begin with the problem of mass unemployment, the vast and tragic importance of which no one here will deny. In fact, as already intimated, the great depression of the 30's was a not inconsiderable factor in bringing on this war.

Now no well informed person pretends to know all about the causes of unemployment. Some causes, however, are not hard to see, and most of these are at least partly removable by cooperative enterprise. I point out several.

One cause of unemployment is the slowing up of the investment of savings in productive industry; and this is particularly noticeable in an economy largely based upon private enterprise. Almost any trifling cause may initiate the downward movement which, once begun, seems hard to stop. Investment funds become dammed up, expansion stops, employees are laid up, general purchasing power declines, demand falls off, industry slows up, more workers are laid off, etc., etc. We are only too familiar with this creeping industrial paralysis. But in cooperative enterprise these things do not happen, at least to the same extent. Savings in cooperative

enterprise are either distributed as patronage dividends or invested in cooperative expansion. In either case they go to maintain or increase demand. In private enterprise it sometimes "doesn't pay" individuals or corporations to maintain or expand investment, and large funds become stagnant. But in cooperative enterprise this is quite senseless. It always "pays" cooperators to carry on the business that supplies their daily wants, and the savings are owned in common by all the members. They steadily flow back into the channels of trade and industry. For example, what happened to the 190 million dollars of savings of British cooperators in 1941? It went either into the pockets of some 9 million people, or was used to improve or expand their commonly owned cooperative facilities, distributive or productive. As a matter of fact all through the depression of the 30's when British private enterprise was shrinking and laying off workers, British co-operative enterprise was expanding and adding constantly to its pay-roll.

If you want to see the statistics, they are given in the history of the C.W.S.; also in the Year Book, telling of the steady expansion notwithstanding the depression.

Another cause of unemployment is in the ownership of valuable natural resources by the few and the periodic withholding of these from use, either because it does not seem to "pay" to use them. That is, there is no profit in them for the time being, or because their legal owners wish to pocket the "unearned increment". If, however, these natural resources are owned by those who use them, there is no possible motive for withholding them from use. Access to, and use of, valuable natural resources is, therefore, encouraged by cooperative development.

A third cause of unemployment lies in the rapid reduction in the volume of "bank deposits" which form a considerable part of the general purchasing power under modern conditions. When a deflationary movement has got well started, private banks are under great pressure to protect their solvency by calling loans, and this only makes the general situation so much the worse. Some relief has come through facilities for rediscounting and through the operations of central banks. And it is very interesting for me to recollect that in this very room I took the initial steps which preceded the organization of the Bank of Canada that we have now. It did not reach its fruition for some ten years afterwards, but a few of us started the ball rolling in this very room in the year 1924. But a cooperative banking system, the foundation for which is now pretty well established, promises further relief. Cooperative banks are not tempted to unduly expand credit nor, on the other hand, to unduly restrict it.

In all these major respects cooperation tends to level off the business cycle and maintain steady employment.

Now, Mr. Chairman, that is condensed in regard to the contrast between the private banking system and the cooperative banking system. I will just put it in a bald way. Unless you really go into the details and see how the thing is working out gradually it perhaps does not amount to very much to you. I think perhaps Dr. Coady might be able to tell you something about the banking feature of that as it is working out in Nova Scotia when he is with you to-morrow.

I refer next to the problem of industrial conflicts, which has so much vexed the modern world and which has, at times, seriously threatened our war effort.

These conflicts arise from the conflicting interests of owner, capitalist and wage-earner, all joined in the same enterprise and quarreling over the division of the proceeds. Now such conflicts do not arise in the case of the self-employed farmer—I happen to be one of those farmers myself and I know

exactly what it means—for the very obvious reason that he is both land-owner, capitalist and labourer at the same time. The rent which he earns as owner, the interest he gets as capitalist, and the wages he receives for his labour all go into the same pocket. This points the way to a permanent solution of industrial conflicts, in joint cooperative ownership, operation and use. Land, labour and capital are essential factors in production, but when they become segregated in different classes of people we soon have trouble. So far we have not tried to do much except through collective bargaining machinery whereby we seek to get some equality of bargaining power. But the more permanent solution of these difficulties would appear to lie in the growth of the cooperative movement.

I would like to comment, if I may, at that point, Mr. Chairman; I think it is a great mistake for citizens to be content with what is obviously patchwork. We have to do patchwork very often in human affairs; we have to do the next thing, because the next thing probably is the only thing possible. But we should see something that is calculated to be permanent in the offing. The next step which we take should not be in contradiction of and an obstacle to the ultimate and permanent trend; and in this matter of collective bargaining, just going back here in Canadian affairs at the present moment in our province of Ontario, we are simply trying to bring about equality of permanent power in these different classes in whom you have the economic functions separated and segregated. And I venture to think quite confidently that if it is only a stop-gap, that the permanent solution lies in cooperative ownership, operation and use.

There is an interesting development in the mid-west and I had hoped the moving genius would have been able to be here to-day. We tried to get him, he is the vice-president of the United States Cooperative Association, Mr. Howden of Kansas City; and at present he is the manager of a large group of cooperative associations, some 300 or 400, in all parts of the United States; and some of their recent developments of particular interest from the point of view of solving this problem are of industrial conflicts.

And now, just for a moment I would like to deal with one of these; Mr. Fowler, I believe, will deal with another one of their activities, but I want to refer to just one of them. They started in an emergency on the production of petroleum and petroleum products; and as a result of that they made a rather huge gain or a surplus or savings the first few years because of the tremendous spread between the wholesale and retail prices on gasoline and oils. Well, the big oil companies of the United States met that cooperative competition by slashing the margin and transferring it to the next step between the wholesaler and the refineries. Then the producers of petroleum products went the next step and set up their own refinery. The next thing they met was a boycott which they had to solve through the medium of drastic legal action. I think some 25,000 of them stormed the state capital and demanded an injunction, or did something that was of quite an emergency character. After that they went the next step and they built their own pipelines and then they went the final step and put down their own oil wells on the properties of their members; and now, in the oil business they are the primary producers, sir, they have the pipelines, the refineries and the distribution of all the products; and the use of them too is all in the same producers. They are all in the one cooperative and they are all working together for the same purpose. Now, there is a wonderful example of the harmonizing influence of this particular system in the more modern world. It can be illustrated, and will be I understand by Mr. Fowler, in respect to another of their activities. I will not go into that.

There is, finally, the problem of international relations, of the importance of which we are all so painfully aware. What contribution can the cooperative movement make to its solution?

Mr. Keen, our General Secretary, has dealt with this matter briefly in a short message which I shall submit later. Meanwhile I may remark that the I.C.A. is a real league of peoples and can do much to remove the causes of war. In fact, world wide cooperative development based upon the universal needs of the common man tends to harmonize the interests of all peoples. The record of the I.C.A. definitely shows this.

Now, Mr. Chairman, may I say in that connection that last summer the Canadian movement received a questionnaire from the head office of the International Cooperative Alliance, which is in London at the moment, asking these questions—these are the questions they submitted: (We were requested to give an expression of our views from relations of points 4 and 5 of the programme, the wartime clauses of the alliance—these are points 4 and 5):

4. To seek agreement on the principles and considerations which should govern a world settlement calculated to ensure freedom, security and universal peace.

5. To determine what should be the contribution of the organized co-operative movement to the adoption and realization of such a programme.

Now, I have here the alternative answer which the Canadian movement gave to these questions. It is pertinent, particularly to this part of international relations, and the contribution which the cooperative movement may make in that regard. I will not read it, Mr. Chairman, because to do so would be trespassing on the time of other people; but it is here and it may be published in the proceedings as a submission; it is relevant to this particular part of my brief.

I conclude with a brief extract from the 16th Annual Report of the Directors of the Manitoba Cooperative Wholesale Society:

Cooperation embraces all factors affecting the social and economic lives of the people and operates in every phase of community life. The newer freedoms must provide every opportunity to the instinctive desires of man to associate for the creation, ownership and control of those services essential to the satisfaction of his daily needs. It is in these terms we interpret the objectives in this world struggle. The ultimate goal of the peace on earth and goodwill among men will not be secured until effective control by the people for the people is established in every land. Cooperation is the full brother to democracy.

That is my submission.

The CHAIRMAN: Thank you, Mr. Good. Is it the wish of the members of the committee to question Mr. Good now or to hear the brief that is to be submitted sometime to-day or to-morrow by Mr. Fowler? Shall we proceed with Mr. Fowler? I think you may proceed, Mr. Fowler.

The WITNESS: I have a statement from Mr. Keen which I should submit. He is not here. He could not get here very well and he sent a written statement. I thought that perhaps it would be fitting to introduce it at this point.

*By the Chairman:*

Q. As part of your submission?—A. No, his submission. It is in writing, you see.

Q. If you wish to put that in all right.—A. Yes, I want to put it on the record somewhere. This is a short statement and he sent it along for inclusion in the record.

*By Mr. McNiven:*

Q. Would you explain who he is?—A. He is our general secretary.

Q. Of the cooperative union?—A. Yes. In fact, it was largely due to his efforts that it was organized in the year 1909, and he has been the general secretary from the beginning. He is quite an old man now but he has been over that length of time the general secretary of the Canadian federation. This is his submission which he asked me to read on his behalf.

The question before the committee for consideration is what contribution can be made by the cooperative movement to post-war reconstruction.

It may reasonably be suggested that the greatest problem which confronts economic society is the ever-widening spread between productive capacity and mass purchasing power; the facilities for wealth production and the effective demand for it.

Some years ago a statistician in the United States said that the contribution of power and machinery to production compared with that of human labour was in the ratio of one hundred to one. That huge spread has created a "bottleneck" in the channel of transmission of goods and services from the point of production to ultimate consumption and use. In normal times warehouses have been glutted with merchandise which the masses needed, but could not buy, and further production has been reduced or suspended in consequence, still further diminishing mass purchasing power through lack of employment.

Private enterprise has enormously increased capacity and facilities for the production of wealth and is continuing to do so. It is aggravating the problem thereby, although it may be unavoidable. Private enterprise has failed to solve, or even to attempt to solve, the problem of distribution.

This it may reasonably be claimed the cooperative movement has done. It has not only advanced economic theories but in a practical and realistic way it has demonstrated their soundness. The cooperative movement has returned to the consumer economies in production created by machine fabricated wealth as well as in the distribution thereof.

Evidence of it may, for example, be seen in the fact that between the years 1929 and 1938 inclusive, which may be regarded as the depression years, the British cooperative movement increased the number of its employees engaged in production, distribution and other services by 107,691; that is from 239,070 to 346,761 at trade union rates of wages, at least.

It is significant that the British cooperative movement during those years returned to the consumers on their purchases annually varying sums around \$140,000,000. The expenditure of that amount, or the greater part of it, by the recipients in the necessities, comforts and conveniences of life increased to that extent the demand for labour for their production, which in its turn created further purchasing power. Cooperation, therefore, creates an expanding economy. Private enterprise, through failure to foster mass purchasing power, has created a contracting one.

Similar results, although on not so large a scale, have been achieved in Canada. By way of illustration it may be mentioned that the British Canadian Cooperative Society Limited last year created purchasing power for its coal miner members in Cape Breton to the amount of \$93,775.00 in purchasing dividends. In the first twenty-five years of its existence the British Cooperative Society returned to its consumer members in purchase dividends two million dollars; an average of 10 per cent of the purchases made by them during the whole period.

Mr. H. L. Fowler has an impressive story as to how his organization and its affiliates have raised purchasing power in Saskatchewan by coopera-

tive economies. Consumers Cooperative Association of North Kansas City on an initial investment in 1929, of \$3,000, has created capital values by savings made in operation of \$1,900,000 without any further cash investment, acquiring oil wells, a pipe line and a refinery therewith. It is obvious that if the whole of the petroleum industry of the United States were consumer-owned, there would accrue therefrom an enormous increase in purchasing power by the people of the country.

Great as are the achievements of the cooperative movement, and impressive as is its rapid expansion throughout the world, it may reasonably be urged that it is a relatively small part of economic society, and that a considerable period of time must elapse before the whole, or even the greater part, of our economic system could be cooperatized.

Nevertheless, cooperators have shown that the practice of their economic principles is in the general public interest. The onus rests on private enterprise to put its own house in order so that it also will, in some substantial measure, in a similar way serve the public interest. The following suggestions may be worthy of consideration by private enterprise which, except as to the democratic features of the cooperative movement, would approximate its principles and practice thereto:

1. fixed rate on capital based on value of physical and intrinsic assets;
2. adequate appropriations to reserve funds to preserve capital investment from impairment;
3. executives' salaries based on value of services rendered, and not on control of industries;
4. reserves not to function as capital—to be invested in gilt-edged and negotiable securities;
5. determination of these questions to be made by industrial courts;
6. surplus to be put in channels of trade by reduction of prices or increase of salaries and wages—or both;
7. progressive elimination of uneconomic production and distribution.

One of the advantages conferred by the cooperative movement upon a community is that having no interest in making profit out of the public, it provides a "yard stick" by which reasonable prices for merchandise and services may be measured.

May I just add another remark here, that the book on Sweden, "The Middle Way," by Professor Childs, gives you some idea as to the functioning of the yardstick.

The existence of a cooperative in a community benefits not only its members, but the whole consuming public as its influence discourages excessive prices by its competitors.

The social value of the philosophy and principles of the cooperative movement is now recognized by most of the provinces of Canada. That fact suggests their action, reflects public opinion irrespective of party. Nearly all of them have established branches of departments or appointed officials to foster cooperative practice and to give aid and guidance to one or more types of cooperatives.

The struggle for new markets by private interests of competing countries necessitated mainly by inadequate purchasing power of their own nationals, and the acquisition of the natural resources and exploitation of the labour of the people of other countries for profit to be

exported has been for many years an ever present cause for or provocation of war. The injustice of practices of this kind was given emphasis recently by President Roosevelt in a speech in Mexico when he is reported to have declared "the day of the exploitation of the resources and the peoples of one country for the benefit of any group in another country is definitely over."

That attitude of mind has long been distinctly cooperative. It is one that the international cooperative movement has always advocated. The Scottish and Swedish cooperative movements jointly own an electric lamp factory in Scotland and recently a milking machine factory has been purchased by National Cooperatives, Inc., of Chicago, a federation of the cooperative wholesale societies of the United States and Canada, the net trading surplus made in which will be returned to each society in proportion to its purchases.

It is respectfully but earnestly suggested that the committee should recommend the Federal government:

1. Strongly to support the claims of the International Cooperative Alliance for inclusion in any conference after the war to deal with the peace settlement and reconstruction, and also that any organizations which may be created to deal with postwar problems shall take the cooperative movement into consultation thereon.

2. To implement the recommendations of the Royal Commission on Price Spreads favourably to consider the introduction of legislation for the incorporation and regulation of cooperatives.

3. To create a branch of a department of the Government to encourage the general public to study cooperative philosophy as a way of life, and to apply it to the satisfaction of their economic and social needs.

4. To impose by legislation or otherwise such restraints on the policies and practices of private enterprise as will be calculated to diffuse more widely and equitably the national income to the end that an effective demand for wealth production may be stimulated as much as possible.

5. To pass such legislation as will foster the practice of cooperative principles and to refrain from the enactment of legislation which will discourage it.

I just venture to make one comment, Mr. Chairman, before I sit down. I have noticed in Canadian life for many years in many public men a disposition to look upon the cooperative movement as a sort of penny saving small affair that will never amount to much, and as a consequence of that entirely mistaken construction of it they have been almost ashamed to come out and openly advocate it or endorse it. It has been very noticeable in my relations with public men, that timidity and shame-facedness they have very frequently exhibited towards something which they do not adequately understand because if this movement—an entirely respectable one, Mr. Chairman, and a very big thing in the world, and I think a bigger thing in the world to come—were properly understood you gentlemen down there in the government would give us not subsidies which we do not want but your blessing and your sympathy.

The CHAIRMAN: Gentlemen, I am sure we are all very glad to have listened to an address by a former member of the House who, as he pointed out, has done work himself in committees of this kind. As you know, there is a reception to-day starting at 12 o'clock held by the Speaker of the Senate for a visiting

president of one of the South American states. I do not want the committee to automatically fall short of a quorum by members gradually leaving the room. I wonder what is your desire? Ten is a quorum. Will there be enough here to continue if we go on with Mr. Fowler? I am inclined to think there will be.

Mr. MACNICOL: I am prepared to stay, Mr. Chairman.

The CHAIRMAN: Will you come forward, Mr. Fowler? As I told you Mr. Fowler is from Regina and is the head of the cooperative movement in western Canada.

H. L. FOWLER, called.

The CHAIRMAN: Mr. McNiven, I have to go out in a minute. Would you mind taking over for the time being?

Mr. D. A. MCNIVEN, acting chairman, presiding.

The WITNESS: Mr. Chairman, ladies and gentlemen: May I first express my very keen appreciation to your vice-chairman, Mr. McNiven, who in your absence yesterday treated us very royally, shall I say. His efforts can only be described as untiring. I think he did everything for us but write our briefs, and perhaps we might have been better off had he done that also.

Mr. MACNICOL: He is very generous.

The WITNESS: Yes. I think that more important than any other activity of the present day in the House of Commons is this work on reconstruction. The eyes of the country are upon it. You have two great jobs to do. The first is to bridge that gap between war economy and peacetime economy which is in itself a tremendous job. Then, more important and more fundamental and perhaps more difficult is the task of bringing up to date what might be termed the scriptural injunction of beating swords into plow shares which today, of course, will mean the utilization of these factories which are now devoted to war work on guns and tanks toward producing goods and articles to enter into peacetime consumption.

It is not only necessary to keep those factories busy but a technique must be found whereby these articles can move into human consumption. Purchasing power must be expanded to enable these goods to move into human channels, and it is with this particular aspect that the cooperative movement is concerned. That is the main premise of our case for the ownership of facilities which must be to a very great extent in the hands of those who use them.

A copy of the particular brief that I am presenting together with the accompanying exhibits has, I think, been placed in the hands of every member of the committee. The exhibits filed are not very lengthy. We do realize full well, and we have realized it to a greater extent the past day or two, the tremendous amount of work that falls on your shoulders as members of the House of Commons. The main exhibits we have filed are not lengthy and we do hope that you will have time to study at least the significant parts thereof.

Perhaps contrary to ordinary procedure, I have placed a summary of my presentation at the first rather than at the last. I now proceed to read that, together with the written brief. Like my colleague, Mr. Good, I would much prefer to speak from notes, but I believe under the circumstances it is better to stick to the prepared brief, making perhaps one or two diversions.

### SUMMARY OF BRIEF

It is the purpose of this brief to show that, with the cooperative movement established as the dominant economy, or at least the dominating factor in the national economy, the problems of post-war rehabilitation and post-war reconstruction can be successfully solved.

The main argument presented in this brief may be summarized as follows:

1. That the thought of all governments in the United Nations is toward planning for post-war rehabilitation and reconstruction with the aim of building an enduring and lasting peace;

2. That wars have their roots mainly in unbalanced economic conditions, and that the present world war is a direct result of the conditions existing prior to the present world war;

3. That the unbalanced conditions referred to are brought about by the economy prevalent and the impelling force behind the economy is the profit motive;

4. That a profit-seeking economy is a fallacy, and impossible to maintain, and must be supplanted by an economy that has as its motive, "Service and equity to all."

5. That the cooperative movement is an economy based on human values and equitable services to all.

6. And finally, that the cooperative movement is the technique whereby purchasing power is placed in the hands of all people, enabling them to use or consume the total production of man and machine.

Perhaps the outstanding difference between World War No. 1 and

World War No. 2 is the amount of study that is being given by all the United Nations to post-war planning and reconstruction. It is further evident that the post-war reconstruction should not be left until after hostilities, but should begin now. There is a determination, not only to win the war, but to win the peace.

The fact that consideration is being given to post-war reconstruction is a tacit admission of the following:—

- (a) A military victory is inadequate;
- (b) The idea of economic nationalism should be abandoned (Point 4, Atlantic Charter);
- (c) In the economic conditions which prevailed prior to 1939 conditions existed which were the major factors in bringing about the Second World War;
- (d) That if the same factors are permitted to continue, we may expect at a not too distant future World War No. 3.

I wish to cite two conditions, out of the many that might be cited, which definitely represent an unbalanced economy:—

1. In the period between the two wars, at one time 20,000,000 people (estimated) on the American continent were out of work;

2. The agricultural industry, constituting approximately 30 per cent of the population of Canada, enjoys only about 15 per cent of the national income. (In the depression years, 1930-1940, the latter figure was said to be lower than 10 per cent.)

We have given two illustrations of an unbalanced economy. We wish now to give several illustrations which, in our opinion, contribute to this unbalanced economy.

1. Press despatches within the past year carried the story of a large American oil company having entered into contracts with the German dye trust, the net result of which kept the secrets of synthetic rubber from the people of the United States and the United Nations.

2. Similarly, a giant electrical concern made similar contracts to keep the secrets of various metal alloys from the people of the United States, thereby denying the people the benefit in connection with defence and war work.

3. W. E. Dodds, U.S. Ambassador to the German Reich, tells in his diary of the sale of armaments running into millions of dollars by the armament makers of the United States and Great Britain to Hitler in the years immediately preceding the outbreak of war. The sale of these armaments was paid for in gold, and all done with the full knowledge of the governments of the United States and Great Britain.

4. One of Canada's greatest resources is nickel. It has been dug out of the ground, processed, and a very large proportion has been sold to Germany and Japan and other nations, with the full knowledge that it was to be used for armaments.

5. The scrap iron has been picked from the waste lots and farms in Canada and shipped to Japan, and we now know the channel through which it is coming back.

6. An automobile tire, costing less than \$8 to manufacture, sells for approximately \$35.

7. A farmer receives, on an average over the years, approximately 25 cents per pound for wool, and buys that wool back in the form of the finished product at approximately \$8 per pound.

There is one underlying theme in all these illustrations, and that is the use of economic power placed in the hands of a group, large or small, for the benefit of that group, without regard to the effect of such action on others.

One might ask, "What is the dominant motive behind all this? What is the impelling force behind the illustrations given above, or as a matter of fact, behind commerce and industry as it is conducted to-day?" The answer is, "To make a profit", or simply, "The profit motive."

For the purpose of this presentation, we might define "Profit" as that amount which is left after all reasonable expenses are deducted.

It is, of course, a mistake to denounce the profit motive in a sweeping manner, because the so-called "profit motive" may be very closely allied to an ambition to succeed. It is impossible to find a distinct line of demarcation between the two. One might sum up the criticism of the profit motive by saying that it is a question of degree. Or, to be more specific, we might say that when the search for profits is pursued to the extent that profit is gained for the few at the expense of the many, it is wrong, and very detrimental in the national economy of the country.

We have dealt with the theory of the profit motive, and we have endeavoured to set out clearly a few of the factors involved.

We now desire to set out two statements, and substantiate them:—

- (a) The profit system maintained as the dominant economic policy is a fallacy, and cannot be maintained in a warless world;
- (b) The profit system is the largest contributing factor in causing depression, and is largely, if not wholly, responsible for the recurring cycle of "booms, busts and wars."

I wish to first submit, for your careful consideration, a pamphlet entitled "The Fallacy of Profits", by Dr. Henry Pratt Fairchild. Dr. Fairchild is a past president of the American Sociological Society and

at present a professor at the New York University. This appears to be a very logical analysis of our present-day economy. His main thesis can be summed up in the statement, "You could not pay a man \$7 to make a pair of shoes for you, and then expect him to turn around and buy these shoes back for \$10, and yet the whole price and profit system rests solidly upon the idea that you can sell a product to a man for more than you have paid him for making it."

The discrepancy between the value of the goods produced and the wages paid, or the cost of production, is dealt with quite extensively by Ellis Cowling in a pamphlet entitled "A Short Introduction to Consumers' Cooperation." This is published by the Cooperative League of the United States. Copies are made available to the members of the Select Committee.

It is therefore submitted that an economy based on profit as the impelling motive is a fallacy. It cannot be maintained in a warless world, and when maintained as it has in the past, it is definitely a point from which conditions arise leading to war.

Our second contention was the profit system is the largest contributing factor for the recurring cycle of "booms, busts and wars". In this connection, we wish to submit a chart prepared by the Cleveland Trust Company of New York. We have no particular comment or conclusions to draw, but it is introduced to point out in a general way that our economy, past and present, has been one of "booms, busts and wars", and it is not very complimentary to human intelligence.

I think I will just hold that chart up. It is one of American business cycles for the past 153 years. I may say parenthetically that we have furnished the King's Printer with 3,000 copies of this chart, and of the one we will view in a moment. It is our hope that the technique may be found whereby to include these charts in your minutes and proceedings.

In commenting on this chart—that is, the Cleveland Trust Chart—Professor E. C. Hope, Head of Farm Management Department of the University of Saskatchewan, said:—

"It can only be described as the result of a planless economy in a profit-seeking world."

In further support of this idea of the faulty profit system, we present a chart prepared from material furnished by the National Forum of Chicago.

That chart is, I think, worthy of careful study. I will read into the record the comment which appears at the bottom. We have described this as "Tendencies under corporate control." Mr. Good, in his submission, referred to the difficulty of human language and did not like the term "private enterprise". I do not think it does adequately describe our present economy, and I think the term "corporate enterprise" is far more fitting at the present time.

Continuing with the comment:

All wealth has its origin in the application of labour to raw material. Labour may be augmented by the modern machine but, as the machine itself is a product of generations of labour, the statement still holds true. The ownership of the machine under our present economic system is largely vested in corporations. This has created a situation where wealth—the product of labour—has been concentrated in the hands of a few

people—corporation owners. As evidence of this, we would quote the report of the Temporary National Economic Committee set up by President Roosevelt:—

The concentration of wealth in the hands of a few not only threatens our economic but our political freedom.

This concentration of the ownership of consumer goods in the hands of a few leads to a corresponding shortage of consumer goods in the hands of the mass of consumers. These goods pile up on the shelves of the nation because the people lack purchasing power. The surplus in the hands of corporations is invested in more factories, more machinery to produce more goods, so piling goods on goods—Want in the midst of Plenty; people walking the streets, idle, unable to secure employment, because the market is already glutted.

Thus the history of the world since the Industrial Revolution has been one of “booms, busts and wars”. The fundamental cause of this is illustrated by the bottleneck—shortage of purchasing power—shown in the incomplete competitive economic cycle above.

Going back to my brief:

It is our main purpose, in presenting this brief, to establish the cooperative movement as the dominant economy, or at least the dominating factor in the economy of the Nation. It is our submission that the economy of to-day, insofar as it is based solely on profit, must be supplanted by an economy of “service to all” as the motive. Human values must have ascendancy over property rights.

We now present, for your careful study and consideration, the second chart, the data for which was also furnished by the National Forum of Chicago.

Again we will read into the record the extended comment thereon, and you will note in comparing the two charts that the cycle in the corporate control is to the right or clockwise, whereas the cycle in the cooperative control works in the opposite direction. The comment reads:

Again we start the cycle with the fact that men produce wealth. Under cooperative enterprise, this wealth is immediately distributed through co-operatives to the people who created it by their purchasing power. As evidence of this, we would instance one cooperative association in Saskatchewan which, in the past ten years, has distributed the sum of \$200,000 in patronage refunds to its members. This distribution in the hands of the members meant greater purchasing power, enabling them to buy more goods, better services, and improve their standards of living. This co-operative transacted only a portion of the business in the community, and one might well wonder as to the destination of the earnings which were made on the commodities purchased through competitive enterprises.

It is suggested that a large portion of this went to build more factories; a large portion of this possibly went out of the country. At any rate, it was not distributed as purchasing power in the hands of the people. Purchasing power is placed in the hands of the people through cooperative dividends, allowing them to buy more goods which, in turn, demands more production and more workers. More workers, in turn, produce more wealth, which is again distributed through co-operatives.

When the cycle is completed, there is no bottleneck, and the full productive capacity of the people is distributed back to them, enabling them to enjoy economic security.

We want to substantiate the theory embodied in this chart by actual cooperative accomplishments. We want to tell you the story of the world's first cooperative refinery in Regina, Saskatchewan.

I shall pause now, Mr. Chairman, to see if the members wish to ask any questions. So far we have dealt with the underlying theory back of our whole movement. Now we want to back up the theory by giving you concrete actual circumstances and facts which are bearing out the theory.

The DEPUTY CHAIRMAN: Is it the wish of the committee that Mr. Fowler shall proceed?

Some HON. MEMBERS: Yes.

The WITNESS:

First, the background. The petroleum industry has perhaps been investigated more than any other industry. Some of you will no doubt remember the history made by Judge Landis, when he fined the original Standard Oil \$1,000,000.00 and split the parent company into several parts. Each part is now larger than the original.

Many of us will remember the 1932 enquiry conducted by a special committee of the House of Commons. The legislature of Saskatchewan was conducting a similar inquiry at the same time, and it is only a year or so ago that the Alberta government appointed the McGillivray royal commission to inquire into the petroleum industry in that province. The result of all these investigations may be summed up, or illustrated, by the story of the individual who went into the small town and asked the resident, "Have you a criminal lawyer here?" The resident replied, "We certainly have, but nobody has been able to catch him yet."

The world's first cooperative refinery rose out of the necessity of cutting farm operating costs in Saskatchewan to meet declining farm revenue.

In the years, 1930-31-32, a number of local cooperatives were formed in the area around Regina. These were quite successful, buying their gasoline locally or importing it in tank cars at the tank car price and selling it to their members at the tank wagon price. The difference between the two, less expenses, was usually declared in the form of a patronage dividend to the members who purchased the commodities.

In the years 1933 and 1934, the independent refineries in Western Canada—and we will refer to them by name, the Maple Leaf Petroleum in Coutts, Alberta; the North-West Stellarine at Coutts, Alberta; the Sterling Refinery at Moose Jaw—were purchased by the major oil companies, and almost coincidental with the date of the purchase, the tank car or wholesale price of petroleum products, particularly farm fuels, was increased by about 3 cents per gallon. There had been no increase in the cost of crude; there had been no increase in the cost of manufacture which could be demonstrated; it was simply what has been generally described as a "squeeze play."

The answer of the members of these various cooperatives was to hold meetings, discuss the situation; a decision was reached to build a refinery. A minimum amount of capital was raised, and a refinery was built at Regina. Operations started in May, 1935.

It is not necessary to go into the story of the reaction of the major companies to this move; it is not necessary to tell the story of price cuts and other forms of opposition. One only might make the observation that the companies, who, at the Saskatchewan legislative inquiry in 1932, said that if the price of petroleum products was reduced  $\frac{1}{2}$  cent per gallon they would lose money, found it possible in the years 1935-1936-1937 to reduce prices of farm fuels by as much as 4 to 5 cents per gallon.

We give you herewith the total sales and net earnings of the refinery each year since its inception:

The DEPUTY CHAIRMAN: The refinery at Regina?

The WITNESS: The refinery at Regina.

| Year       | Sales       | Net Earnings |
|------------|-------------|--------------|
| 1935.....  | \$ 253,000  | \$ 29,900    |
| 1936.....  | 521,000     | 24,900       |
| 1937.....  | 431,700     | 11,500       |
| 1938.....  | 652,800     | 126,600      |
| 1939.....  | 1,010,800   | 151,900      |
| 1940.....  | 1,631,700   | 245,900      |
| 1941.....  | 1,920,700   | 304,100      |
| 1942.....  | 2,264,500   | 258,200      |
| Total..... | \$8,686,200 | \$1,153,000  |

The government of the province of Saskatchewan no longer makes public the figures of total petroleum consumption in the province, but as nearly as we can estimate, the cooperative refinery is approximately 10 per cent.

This would mean in round figures that, while the cooperative refinery was making a saving for its members of \$1,153,000, other refineries were earning approximately \$10,000,000. The earnings made by the cooperative refinery were credited to the purchasers of petroleum products on a patronage dividend basis. One might ask, "Where did the \$10,000,000 go, that was, or should have been, earned by the other refineries?" The oil companies, who transacted 90 per cent of the petroleum business in Saskatchewan, must either plead guilty to having extracted \$10,000,000 therefrom, or must admit that their operation is less efficient than that refinery run by the farmers of the province.

But that is not all the story.

The cooperative refinery sells its products at wholesale prices to local cooperative associations only. They, in turn, sell to their members at the retail price. Thus, the operation from the crude form to the finished product is broken in two—manufacturing and distribution. To give you the picture of distribution, and thereby complete the whole, we tabulate herewith the result of operations of the Sherwood Cooperative Association since its inception; the Sherwood Cooperative Association is operated by the farmers in the Regina area and residents of the city of Regina:

| Year       | Petroleum Gallonage | Value of Total Sales | Value of Sundry Mdse. | Total Savings | Portion of Savings from Refinery |
|------------|---------------------|----------------------|-----------------------|---------------|----------------------------------|
| 1931.....  | 141,523             | \$ 31,473 39         | .....                 | \$ 4,053 36   | .....                            |
| 1932.....  | 101,603             | 23,417 78            | .....                 | 1,869 27      | .....                            |
| 1933.....  | 175,519             | 37,043 04            | .....                 | 4,891 95      | .....                            |
| 1934.....  | 159,207             | 35,309 25            | .....                 | 2,889 44      | .....                            |
| 1935.....  | 328,385             | 70,046 55            | .....                 | 11,335 35     | \$ 4,909 58                      |
| 1936.....  | 493,816             | 103,896 01           | .....                 | 15,076 74     | 5,017 48                         |
| 1937.....  | 461,977             | 96,891 62            | .....                 | 12,423 44     | 2,601 56                         |
| 1938.....  | 679,730             | 131,407 24           | \$ 3,502 55           | 36,017 00     | 19,543 19                        |
| 1939.....  | 894,258             | 179,379 41           | 8,514 20              | 46,318 85     | 20,722 76                        |
| 1940.....  | 1,045,003           | 245,860 50           | 34,244 66             | 59,576 00     | 18,270 88                        |
| 1941.....  | 1,204,068           | 332,005 49           | 67,518 27             | 70,551 77     | 22,139 81                        |
| 1942.....  | 1,269,185           | 382,608 37           | 102,423 11            | 64,742 19     | 18,949 74                        |
| Total..... | 6,954,274           | \$1,669,338 65       | \$216,202 79          | \$329,745 36  | \$112,155 00                     |

Their operations show a net saving of \$329,745 on purchases of \$1,669,338. We have no way of ascertaining the percentage of business done by the Sherwood Cooperative Association in relation to the business done by competitive concerns. It is a fair estimate that the volume of business done by competitive concerns would be many times that of the

cooperatives. Again one might ask (and it is regrettable that the answer cannot be given in detail) as to where did the money go that was earned on the amount of business done by competitive concerns in the Regina area during the past ten years. In the case of that earned by the Sherwood Cooperative Association, we have audited statements to show where it went. A certain amount of it was credited in the form of share capital to provide the facilities by which business might be properly conducted. However, the greater portion of it was returned to the consumers as patronage dividend. This patronage dividend has increased purchasing power in the hands of the members of this association, and meant for them more clothing, more furniture, better homes, better health services—in short, a better standard of living. It, in turn, provided a greater consumption of goods, meaning more production, more factories and more employment.

To express the result of cooperative action in the petroleum field in a different way, we give you herewith the comparative figures, taken from a farmer's actual records, of his petroleum costs in the years 1930 and 1940:—

1930 Fuel Costs (before cooperative manufacture and distribution)

|                      |            |          |
|----------------------|------------|----------|
| 700 gals. Gasoline   | @ 26 cents | \$182 00 |
| 1,500 " Fuel (Kero.) | @ 26 cents | 390 00   |
| 45 " Pure Penn oil   | @ \$1.25   | 56 25    |
| 10 " Trans. Oil      | @ \$1.00   | 10 00    |
| 100 lbs. Gun Grease  | @ 18 cents | 18 00    |

Total cost 1930 (List)..... \$656 25

1940 Fuel Costs (after cooperative manufacture and distribution)

|                      |              |          |
|----------------------|--------------|----------|
| 700 gals. Gasoline   | @ 16.5 cents | \$115 50 |
| 1,500 " Fuel (Dist.) | @ 15.0 cents | 225 00   |
| 45 " Pure Penn Oil   | @ 95.0 cents | 42 75    |
| 10 " Trans. Oil      | @ 80.0 cents | 8 00     |
| 100 lbs. Gun Grease  | @ 11.0 cents | 11 00    |

Total cost 1940 (List)..... \$402 25

Total 1930 Cost at List (as above)..... \$656 25

Total 1940 Cost at List (as above)..... 402 25

Total Saving List Price..... \$254 00

Plus Dividend Actually Paid..... 99 15

Total Saving on One Section of Land..... \$353 15

\* Less: Saving attributed to reduced crude costs..... 39 40

Total Saving attributed to cooperative manufacture and cooperative distribution (a saving of 47.8 per cent over a period of ten years)..... \$313 75

\* In 1930, Western Canadian crude supplies were of U.S. origin;

In 1940, Western Canadian crude supplies came from Turner Valley, with a consequential saving in transportation.

It is only fair to reconcile that on the basis of origin of crude, because in 1930 the crude supplies came from the Wyoming field and in 1940 from the Turner Valley in Alberta.

*By Mr. MacNicol:*

Q. Did you mention the figure of \$313?—A. \$313 net actual reduction in power farming on one section of land.

*By Mr. Graham:*

Q. Based on the same gallonage?—A. Based on exactly the same gallonage.

The cooperative refinery at Regina is perhaps the best illustration of the results of the economies and economics of the cooperative movement, as applied to a particular problem. It will be noted that it was applied in a field where it is alleged (and we think, fairly so) that a great monopoly exists. It was applied in a field where the exponents of the present profit economy maintain that no further economies could be effected. These statements were made at the various enquiries at Ottawa and Regina and Calgary.

Now, I should like to digress there for a brief moment. Mr. Good indicated that in the presentation of this case we had endeavoured to secure one of the American cooperative leaders because down there they have accomplishments which are particularly interesting. We had in mind Mr. Lincoln, who is president of the Cooperative League and general manager of the Ohio Cooperative. He would have told us of the tremendous saving they have made in fertilizer in their area, where, through the ownership of fertilizer factories they have, as they claim, broken the back of the fertilizer trust.

Mr. Good referred to the Consumers' Cooperative Association of Kansas city. There is an interesting circumstance there which I think you will find enlightening and particularly significant. Last year this association purchased a small canning factory at Scottsbluff, Nebraska. An examination of the figures of the factory's operation for the previous year shows that the farmers in that year received \$44,000 for vegetables and the tin can company received \$69,000 for tin cans. Surely here is a maldistribution of the consumer's dollar. Now they have endeavoured to correct that situation. At the end of their first fiscal year they had quite a surplus in the operation of this canning factory. Before distributing it in the ordinary way, as a cooperative does on patronage dividends to consumers, they first paid a patronage dividend to producers. They took some of the earnings of that factory and went back to the farmers from whom they had bought the vegetables and paid them a bonus, shall I call it, and incidentally the bonus was paid in relation to the quality of the particular product delivered by the farmer. I think that is interesting.

Another interesting fact is that in the operation of that factory this year 2,000,000 pounds less water will go in cans. Now, that is not related to the dehydration of vegetables at all; it simply means that the factory is operating from the standpoint of providing food for people; and you can quite imagine that the housewife canning shall we say peas, and having twelve quarts, would not distribute them among fifteen quarts and can the water; that was, water accruing in the previous operation of that factory. The jobbers to whom the output of the factory previously went ordered canned goods on the basis of their specifications, which included an amount of water that was not necessary.

Now, Mr. Chairman, we have dealt with the story of the refinery. The next part of my brief deals a little bit with the future, in what we have done and are doing in connection with the great problem of farm machinery prices. Do you wish to ask any questions in regard to refining operation or technique or any points that have been raised?

The DEPUTY CHAIRMAN: What did the canning industry in Ohio do in respect to manufacture of cans? You gave us some figures.

The WITNESS: They have not done anything further, Mr. Chairman; but it is their intention, or at least their avowed intention, to make their own tin cans at some time in the future.

*By Mr. McDonald:*

Q. There is a question I would like to ask you there and it is in regard to the amount of water that went into the canned goods. I would like to ask where the inspectorship came in—they must have no inspection on that there.—A. Not to my knowledge is there any government regulation over there in regard to percentage of solids and water in cans.

*By Mr. White:*

Q. Would you say that your refinery would never be in a sound position until they owned the source of the raw material?—A. That is quite true, sir. We are now endeavouring to find crude oil, and I suppose some of you gentlemen could tell us where we could drill. So far our activities have been limited to refining. We have got no results from drilling in the areas we have tried.

Mr. WOOD: Mr. Good might be a good adviser.

Mr. GOOD: I could not help you on that.

The WITNESS: Suffice it to say that we have in the last two years embarked on crude explorations in an endeavour to find our own wells. We reversed the operation. Where our American friends started the refining business we must admit that they have stepped out now so that they can not only do the refining, but they own their own pipelines and their own oil wells and so on. Our operations will not be on a satisfactory basis until we control the manufacturing costs; those costs include extraction of the oil from the ground.

Mr. WOOD: Mr. Chairman, I know that I am not a member of this committee, but might I have the privilege of asking this witness a question?

The DEPUTY CHAIRMAN: That all depends on the pleasure of the committee. Gentlemen, is it your pleasure that Mr. Wood should be given the privilege of asking a question at this time; or, would you prefer that we go ahead and let this witness complete his brief and have questions asked at the conclusion of that.

Some MEMBERS: Let the witness proceed.

Mr. MACNICOL: I think we should let the witness proceed and have questions come at the conclusion of his submission.

The DEPUTY CHAIRMAN: All right then, we will ask the witness to proceed.

The WITNESS: Thank you, Mr. Chairman:

We now wish to deal, as briefly as possible, with the matter of farm machinery prices. It is a problem that has concerned, not only farmers themselves, but federal governments of both Canada and the United States. The federal government at Washington conducted a very extensive inquiry into this matter in 1936, and members of this committee will well remember the inquiry which took place by a committee of the House of Commons in 1936-37. It would be agreed that out of these two main inquiries no direct solution to the problem was found.

Mr. MACNICOL: But the prices were raised in Canada?

The WITNESS: Yes, I think they were; they went up just to make the measure perfect.

There was no plan drawn up or technique suggested whereby the farmers of this continent might secure the machinery entering into the production of primary products at reduced prices. The problem was very carefully analysed, but that was all. As a matter of fact, the companies were allowed to maintain the increased prices which had been the direct cause of the Ottawa inquiry.

In 1939, the legislature of the province of Saskatchewan appointed a select committee to inquire into the same problem. A copy of the committee's report is filed with this brief.

It is interesting to note that my good friend, Roy Graham, who was counsel on this inquiry has now been elevated to a higher position and that he is one of your colleagues.

We would like to quote from this report, as follows (pages 24-25):

Each company indicated, through its representatives, that it had no such suggestion or plan, and that there did not appear at the present any indication that a price reduction would occur this year.

The committee had hoped the industry would recognize the urgency of the problem and have concrete suggestions to make. In the light of the above statements by the companies, the committee is forced to conclude that the companies cannot, or will not, provide any solution of the problem of present farm implement prices. (Pages 24-25.)

The committee strongly approves of the cooperative plan before outlined. It is definitely of the opinion that the true and permanent solution to the problem of farm implement prices is to be found in cooperative effort. (Page 44.)

This committee's report was adopted by the legislature of Saskatchewan, and thus we have the cooperative movement offered as the only solution to a problem which, it is fair to state, has baffled the governments of both Canada and the United States for many years.

Following the suggestion of the Saskatchewan legislature, there has been organized, with the assistance of the three prairie governments and the major cooperatives in Western Canada, Canadian Cooperative Implements Limited. A pamphlet descriptive of this organization is filed with this brief.

That related to two pamphlets, "Cooperative Machinery Plan" and "History in the Making."

This cooperative is still in the state of organization in the three prairie provinces. Slightly over 25,000 farmers have become members. They have subscribed for capital approximately \$340,000, of which \$240,000 is paid up.

Had it not been for war allocations, priorities, etc., the company would have commenced business last year. Because of this breathing spell, we have definitely widened our scope, and our cooperative machinery plan now involves complete cooperation with the farmers of the United States.

National Farm Machinery Cooperative Incorporated is a central organization, owned and controlled by the large regional cooperatives in the United States and Canadian Cooperative Implements Limited. The cooperative farm machinery plan is now international in scope, and farmers, whether they live in Peace River, Saskatchewan, Indiana or Kansas, will stand shoulder to shoulder to work out the solution to a common problem. We have freely stated that we, as farmers, are going to do our part in wiping out the 49th parallel as an economic boundary between men.

Our plan involves the assembling and manufacture of farm machinery and parts at strategic points in western Canada. We have already approached the government of the day in connection with the utilization of machine shops and equipment in western Canada. Further, we have approached them in respect to a vast amount of war material, much of which can be used on the farm, which will be no longer needed after the war is over.

We do not wish idly to boast, but it is the firm conviction of co-operators in western Canada that we can duplicate in the field of farm machinery our accomplishments in the petroleum field.

Saskatchewan has been described by many co-operators as "The Major Cooperative Province." There are some 500 retail cooperative societies ranging from a small bulk trading or car lot association to large businesses such as the Sherwood Cooperative Association illustrated above. In the year 1941, these societies did a total business of approximately

nine million dollars on which net surpluses of three-quarters of a million dollars were created. These societies own and control the Consumers' Cooperative Refineries Limited referred to above, as well as the Saskatchewan Cooperative Wholesale Society Limited. We have filed with this brief a copy of the 1942 report of the Commissioner of Co-operation and Markets in the Province of Saskatchewan. In this report you will find further comparative statistics and other details respecting the cooperative movement in Saskatchewan.

The Saskatchewan Cooperative Wholesale Society was incorporated in 1928, and since that time has had a total sales volume of more than fifteen million dollars, and net earnings of half a million dollars. This wholesale society supplies to the people of Saskatchewan, through retail societies, such commodities as coal, binder twine, lubricating oils, greases, gasoline, farm fuels, tractors, farm machinery, farm machinery repairs and general lines of hardware. It also operates a wholesale grocery department and two feed mills. It has a substantial interest in mines located in the Alberta coal fields, and operates a flour mill as a subsidiary company.

And now, I wish just to emphasize one or two of the things in this report and to read into the minutes and call particular attention to a table of statistics on page 148 which gives a very excellent resumé of the financial growth of the cooperative movement in Saskatchewan.

#### AGRICULTURAL ANNUAL REPORT, 1942

TABLE VI.—FINANCIAL RESULTS OF ALL CO-OPERATIVE ASSOCIATIONS IN SASKATCHEWAN, 1914-1941

| Year  | Associations reporting | No. of Members | Paid up Capital |      | Assets    |      | Liabilities to the Public |       | Total Sales |      | Net Surplus |       |
|-------|------------------------|----------------|-----------------|------|-----------|------|---------------------------|-------|-------------|------|-------------|-------|
|       |                        |                | \$              | cts. | \$        | cts. | \$                        | cts.  | \$          | cts. | \$          | cts.  |
| 1914  | 102                    | 2,850          | 13,194          | 20   | 37,337    | 53   | .....                     | ..... | 281,354     | 64   | .....       | ..... |
| 1915  | 173                    | 5,537          | 39,421          | 49   | 105,322   | 37   | .....                     | ..... | 964,892     | 67   | 19,102      | 27    |
| 1916  | 279                    | 9,444          | 92,940          | 27   | 295,012   | 40   | .....                     | ..... | 2,122,832   | 90   | 54,072      | 82    |
| 1917  | 304                    | 12,459         | 151,805         | 56   | 624,854   | 51   | .....                     | ..... | 4,160,262   | 83   | 110,921     | 89    |
| 1918  | 329                    | 15,132         | 230,002         | 86   | 941,410   | 94   | .....                     | ..... | 5,278,166   | 03   | 93,146      | 94    |
| 1919  | 350                    | 18,248         | 362,251         | 74   | 1,424,582 | 45   | .....                     | ..... | 6,189,591   | 02   | 115,557     | 66    |
| 1920  | 337                    | 18,894         | 466,009         | 49   | 1,708,239 | 86   | .....                     | ..... | 7,314,695   | 01   | 191,819     | 56    |
| 1921  | 343                    | 18,008         | 501,070         | 33   | 1,522,760 | 80   | .....                     | ..... | 5,026,822   | 35   | 135,493     | 68    |
| 1922  | 321                    | 16,849         | 504,570         | 19   | 1,363,043 | 81   | .....                     | ..... | 4,107,239   | 07   | 110,997     | 34    |
| 1923  | 304                    | 16,082         | 438,557         | 19   | 1,143,599 | 99   | .....                     | ..... | 3,643,501   | 87   | 96,110      | 16    |
| 1924  | 304                    | 14,663         | 470,505         | 20   | 1,202,486 | 67   | .....                     | ..... | 3,562,006   | 04   | 66,644      | 77    |
| 1925  | 260                    | 14,187         | 494,687         | 49   | 1,245,452 | 44   | .....                     | ..... | 3,940,332   | 62   | 91,181      | 25    |
| 1926  | 258                    | 14,948         | 546,601         | 30   | 1,406,829 | 41   | .....                     | ..... | 3,974,751   | 04   | 120,409     | 42    |
| 1927  | 243                    | 13,867         | 547,888         | 97   | 1,461,394 | 38   | .....                     | ..... | 3,861,904   | 71   | 128,566     | 28    |
| 1928  | 216                    | 13,819         | 569,829         | 17   | 1,638,139 | 51   | .....                     | ..... | 3,879,773   | 01   | 135,963     | 33    |
| 1929  | 253                    | 15,128         | 603,781         | 69   | 1,665,603 | 55   | .....                     | ..... | 3,478,550   | 60   | 98,178      | 52    |
| 1930  | 271                    | 16,334         | 635,784         | 46   | 1,611,968 | 14   | .....                     | ..... | 2,774,414   | 26   | 58,167      | 00    |
| 1931  | 285                    | 16,998         | 652,484         | 40   | 1,484,673 | 48   | .....                     | ..... | 2,060,943   | 56   | 17,664      | 08    |
| 1932  | 279                    | 17,820         | 639,701         | 00   | 1,374,447 | 74   | 327,927                   | 61    | 1,888,145   | 77   | 19,761      | 01    |
| 1933  | 283                    | 17,989         | 633,235         | 24   | 1,334,005 | 21   | 313,415                   | 86    | 1,715,658   | 87   | 46,087      | 23    |
| 1934  | 281                    | 18,229         | 640,256         | 38   | 1,320,405 | 10   | 300,217                   | 37    | 1,863,711   | 35   | 52,666      | 15    |
| 1935  | 326                    | 21,131         | 716,305         | 49   | 1,689,184 | 45   | 355,640                   | 15    | 2,770,466   | 72   | 127,507     | 49    |
| 1936  | 355                    | 22,744         | 668,486         | 75   | 1,518,935 | 01   | 348,444                   | 57    | 2,896,517   | 91   | 126,630     | 95    |
| 1937  | 426                    | 29,188         | 753,538         | 41   | 1,729,660 | 37   | 447,842                   | 87    | 3,125,101   | 65   | 128,160     | 24    |
| 1938  | 445                    | 31,882         | 790,878         | 00   | 1,839,735 | 43   | 438,394                   | 06    | 3,974,226   | 09   | 260,638     | 21    |
| 1939  | 473                    | 37,614         | 800,713         | 44   | 2,153,222 | 36   | 670,719                   | 29    | 4,685,620   | 51   | 411,687     | 59    |
| *1940 | 615                    | 52,272         | 1,035,723       | 19   | 2,869,680 | 14   | 812,249                   | 34    | 7,340,516   | 28   | 644,448     | 32    |
| *1941 | 662                    | 74,260         | 1,246,360       | 60   | 3,721,349 | 98   | 825,007                   | 76    | 8,250,007   | 76   | 733,338     | 82    |

\* The 1940 and 1941 figures include one organization registered under The Joint Stock Companies Act transacting business on a co-operative basis.

The same authority has this to say about credit unions:

During the year under review, Saskatchewan credit unions made 3,656 loans amounting to \$295,104.99, an average loan of \$80.72, as compared with 3,119 loans amounting to \$223,976.45, an average loan of \$71.81, during 1940. Up to December 31, 1941, Saskatchewan credit unions had loaned a total of \$675,765, of which not one dollar had been written off.

In other words, the farmers and the residents of the towns and villages, the doctors, the lawyers, the dentists, the merchants—those who are operating these credit unions are making loans for various purposes; they are making loans to farmers to buy feed, seed, for threshing expense and for the purchase of machinery and machinery repairs; and one of the credit unions in Saskatchewan has made the loans, five or six of them, to buy automobiles—that might look rather sad but the actual fact in those cases was that they made the loans to save the automobiles and trucks from being repossessed by private finance corporations, and those loans were paid.

Then, on page 156 there is a résumé of our Saskatchewan Cooperative Credit Society which might be called a cooperative bank. It is acting as a clearing house for the surplus funds of credit union cooperatives and you will see there that where the organization has grown rapidly—you will notice that in the first year we made total loans of \$409,129.96.

#### *Saskatchewan Cooperative Credit Society, Limited*

Incorporated in April, 1941, and authorized to commence business in September of the same year, the Saskatchewan Cooperative Credit Society, Limited, has already given indications that it can play a useful part in centralizing and helping to administer surplus funds of the credit union and cooperative movements of the province. At the time of writing the Society had 73 member organizations of which 34 were credit unions and 39 were cooperative associations. Loans made up to that time were in excess of \$400,000 and were distributed as follows:—

|   |                     |
|---|---------------------|
| Cooperative Associations.....                   | \$ 19,840 96        |
| Credit Unions.....                              | 12,289 00           |
| Call loans to major cooperative organizations.. | 377,000 00          |
| Total .....                                     | <u>\$409,129 96</u> |

Loans have been granted to credit unions for the most part to finance the seasonal requirements of farmer members, particularly at harvest time. One credit union serving the needs of city school teachers secured a loan to help finance its members over the summer months. Loans to cooperative associations have been for the purpose of enabling them to expand their grocery services, to purchase equipment and to assist in the production of goods for sale. One cooperative association secured a loan to enable it to go on a cash basis with its wholesalers and consequently to take advantage of all discounts. Where the Society has not been able to make immediate use of all funds at its disposal, it has been able to place these on a call basis with some of the major cooperatives. To date, no loan has been turned down for lack of funds on the part of the Credit Society.

At the end of August, 1942, the Society's paid up capital amounted to \$20,000, while funds on deposit were slightly in excess of \$125,000 at that time.

We are trying in Saskatchewan to lay a foundation for this economy.

And now, I just want to read into the record very briefly some figures from Denmark. Denmark, I think, is one of European countries where it is fair to say that the economy is mainly cooperative. I think you will find these figures very significant. In 1850 forty per cent of the farmers in Denmark were tenant farmers; in 1935 only three per cent of the farms in Denmark were tenant farms. In other words, the trend along with the development of cooperative economy had been that at the time these statistics were prepared—and they come from the official statistics of the government of Denmark—the position had been reached where 97 per cent of the farms were owned by the people operating them. Now, in United States in 1880, 25·6 per cent of the farms were tenant farms and in 1932, 42·1 per cent of the farms were tenant farms. I noticed in Saskatchewan there is the same tendency. There is a tendency on this continent for the ownership of farms to be logged. In Denmark the tendency is in the opposite direction.

Here is another interesting and significant figure: in Denmark in 1933 the dollar was divided as follows—the farmer got 63·4 per cent; processors and distributors got 36·6 per cent. That indicates that the processor got a little over one-third and the farmer got practically a full two-thirds. In 1936 in United States the farmer got 38·5 per cent and the processors and distributors got 61·5 per cent. In other words, the relative percentages were just about reversed as between an economy that is dominated by cooperatives and an economy where the competitive factor is the one that rules.

And there is another development in Saskatchewan which you may find interesting. Just before I left we had a meeting of our group. We purchased a funeral home. You all know and perhaps some of you have had experience as to what funerals cost financially. However, we estimate that if we have a demand for that service to the extent of 300 funerals a year the net cost will be about \$65. As a matter of fact, one of our members has quipped that we had better not do this thing because we are going to make it so attractive that people will find it cheaper to die than to try to keep on living.

MR. MACNICOL: You will recall there is a reference to something like that in the good book.

THE WITNESS: Yes. Then we have our medical groups. Then I think we are giving practical expression to the phrase "guidance from the cradle to the grave".

#### *Saskatchewan Cooperative Wholesale Society, Limited*

Sales for the fiscal year 1941-42 were \$2,888,547, being an increase of almost 30 per cent over the previous year.

This increase, in view of general conditions and restrictions on imports, is quite gratifying and indicates a greater measure of support from the existing cooperative associations of which 368 are now shareholders of the Wholesale Society.

Due to the ban on organization of new associations for the handling of petroleum products little cooperative expansion took place during the past year. Existing associations, however, have generally speaking become more soundly established and in many instances have expanded their activities.

The financial position of the wholesale society is steadily improving through savings made from year to year, which savings are being set up to the credit of cooperative associations under the revolving door plan. Last year some \$86,000 of net savings was built up as a result of the year's trading activities.

### *The Cooperative Mutual Benefit Association*

This association has now been in operation for a little over two years. Since the last report the membership has increased by approximately 1,200 and the association now has a membership of 4,500. The providing of funeral benefits, not to exceed \$400, is supplemented by favourable agreements with the Embalmers' Association, Regina Monumental Company, and an optometrist, for the supplying of their respective services on a low cost basis. Since organization there has been a paid total of \$24,800 in funeral benefits.

For additional data in connection with the cooperative movement of Canada, we would refer the committee to the 1942 *Canada Year Book*, Pages 543-556.

If the dominant economy of the nation were a cooperative economy, based not on "profits for the few", but "service to all", then there would be no duplication of service. If a group of individuals, large or small decided to provide for themselves cooperatively a certain commodity or a certain service, it is unlikely that they would provide duplication of that commodity or service. To illustrate this point, for example, when a city or town decide that they need a waterworks service, they do so without a thought as to whether or not it is necessary to provide several services or duplications. And by the same token, if a group of individuals, large or small, desire to serve themselves with a commodity, they will do so in the most direct manner without duplication or waste of effort.

In conclusion, we wish to draw to the attention of the members of this committee that we have had an economic system actuated to a large degree by the desire for profit. To keep it from running rampant, we have introduced the supposedly controlling factor of competition. We have seen from examples cited at the beginning of this brief, that monopolies are detrimental to society as a whole, and comparative wastes have developed. In a recent House of Commons committee report, dealing with farm machinery, a statement is made that there has been a great deal of competition in the matter of sales, but no competition in the matter of price. We suggest that the introduction of cooperative business as a dominant part of our economy would eliminate most, if not all, of the duplication or waste in our present system, and would also provide a brake on any monopoly motive detrimental to the common good.

In Canada, we have, through cooperative development and organization over the past number of years, been laying a strong and solid foundation for a cooperative economy. Through cooperation, our problems are not to be laid at the doorstep of a state or the government, but our problems are to be solved through the technique of mutual self-help, as provided by the principles of the cooperative movement.

The economic ills which beset us to-day are of long standing. They are the accumulation of economic maladjustments throughout many years. It is obvious that no solution can be applied overnight to bring about political and economic utopia. The cooperative movement is represented as the long-term solution. In the meantime, there must be some technique of regimentation and control that will provide for the evolution or transition from a wartime economy to a peacetime economy with full employment and abundance for all.

For the purpose of bringing this about, we would commend study such as is being made by this and other rehabilitation committees, leading toward projects which have the above goal in view.

We would recommend further that this committee should provide in its planning for the facilitation of any legislation or plans which will assist in the development and extension of a cooperative economy based on self-help.

Thank you, Mr. Chairman.

The DEPUTY CHAIRMAN: Thank you very much indeed, Mr. Fowler. The applause at the conclusion of your address indicates appreciation by the members of the merit of your address and also the time and care that has been taken in its compilation. We have about twenty minutes before one o'clock. Both Mr. Good and Mr. Fowler are here and will be glad to answer any questions that members of the committee wish to ask them.

*By Mr. Hill:*

Q. I would like to ask just one question. I was rather impressed with Mr. Fowler's statement as to the distribution of costs between the processor and the producer. What do you mean by the "processor", the man who buys these goods and processes them and puts them on the market?—A. I would say, sir, all those motions, shall we call them, which are brought into play after the farmer has delivered his goods to the market.

Q. You include in processor the cost of distribution?—A. Definitely.

Q. Did you ever write down the cost of distribution in Denmark and the United States? That is one question that I think it quite important there—A. It is, of course, important but the bald fact remains that they are doing that and if they have a low cost distribution which they must have—

Q. That is because of the climatic conditions. In Denmark you have a narrow country where the cost of distribution is nothing but the cost of distribution in the United States is terrific. That is, your fruits have to be brought from California, a distance of 4,000 miles, or from Florida, a distance of 2,000 miles. It is the same when we take the question of vegetables, such as potatoes. Potatoes can be bought in the Maritime provinces for \$1.50, but by the time you pay a dollar a barrel to bring them up to Montreal, there is not much producer's profit.—A. No. To be frank, of course, that is a factor.

Q. That is the point I have been trying to make. The cost of transportation is a factor, and I think something has to be done about transportation costs in Canada.—A. I thoroughly agree with you. I have not the figures with me. We have been trying to work out something with regard to the producer cooperatives and the consumer cooperatives in the matter of apples. We hated to see, when our children did not have apples, as was the condition three years ago, 500,000 boxes of apples destroyed. The freight was quite an item, but it was not the biggest item of the spread between the producer and the consumer.

Q. Your distribution costs are terrific, between Canada and the United States.—A. Yes. The point you make is quite a factor.

Q. I do not think that it should be left quite as it is, because it is a little misleading.

Mr. GOOD: I wonder if I might state an individual case in answer to Mr. Hill. Quite a few years ago I shipped some apples to Winnipeg from our local producers' cooperative.

Mr. MACNICOL: Was that a carload or less than a carload?

Mr. GOOD: A car lot, yes. One of the barrels fell into the hands of a friend of mine in Winnipeg who was in newspaper work. He wrote to me about it. My name was on the barrel. He said, "I paid \$6 for this barrel delivered to my house, and I am interested in knowing what you got." I got \$2.90 on board cars at Brantford. The transportation was 83 cents a barrel, car lots.

Mr. HILL: That is from station to station, not taking the transportation costs in the city into account.

Mr. GOOD: I figured the legitimate cost of transportation of the barrel from the station. It did not go into storage in Winnipeg. It went right from the car, or in the course of a few days went right into his cellar. It should not have

been very much. I rather figured that any reasonable system of distribution should have put that barrel in his cellar for \$4—83 cents, plus \$2.90, plus cartage at Winnipeg. There was no cartage at my end, because I put it on the car.

Mr. HILL: That is quite correct if the goods were all sold and delivered direct from the car and are not going to use cold storage.

Mr. GOOD: He paid \$6 for it. I raised the question of what happened to the \$2. I figured that he should have had it for \$5 and I should have sold it for \$4.

Mr. HILL: That particular man had to pay for the cost of somebody else's storage.

Mr. GOOD: Probably.

Mr. HILL: Before the goods were sold. We checked that up in the maritime provinces. Our apples go to Montreal and we get a very small amount. The distribution cost is terrific. Nevertheless, we have checked that up very carefully and tried to have agents handle it as economically as possible. We cannot see where they are making an excessive profit, when you take in all your costs of distribution in the city of Montreal, the loss through the fact that the goods are not sold and the weather changes, if they are not in cold storage. The loss is tremendous. I know that apples were sold down there in perfect condition; they go out on the train, with a certain amount of movement, possibly and they tell you with regard to these apples that they have sold half of them in very good condition and give you so much, but the other half were in bad shape. That is due to distribution.

Mr. CASTLEDEN: Along that same line, I was wondering if Mr. Good or Mr. Fowler have made any investigation as to the number of hands through which these commodities pass in going from producer to consumer. I was interested in visiting the Okanagan valley in 1941 and finding a tremendous percentage of organization of the growers there in the apple business. I was surprised to find that there was no connection between the cooperators there in the producing field and the cooperators in Saskatchewan in the consumers' field. I was wondering whether those two could not be linked up, and that is my question. Has any investigation been made as to the number of persons or organizations through which these things pass in the process of distribution? I found that the man in the orchard in British Columbia was getting about 55 cents for his apples.

Mr. MACNICOL: Per box?

Mr. CASTLEDEN: Per box, yes. And the consumer in Saskatchewan was paying \$2.50 for them—a ratio of about 5 to 1. In checking the other end of it, I found that the farmer in Saskatchewan who was allowed to sell his wheat was getting 50 cents a bushel for it, and the consumer in the Okanagan valley who was buying this was paying about \$2.50 a bushel. The ratio was about 5 to 1 in both cases.

Mr. HILL: I can tell you something that perhaps is more interesting. Take a can of fish from the maritime provinces. Sardines from the maritime provinces are laid down in Calgary at \$1.05 a case. We can lay them down in Sydney, Australia, at 25 cents for the same case, a distance of 12,000 miles.

Mr. CASTLEDEN: Could I have an answer to my question?

The WITNESS: May I say in a general way in regard to the problem raised by Mr. Castleden, that we have been working for some time on having producer cooperatives and consumer cooperatives meet in regard to the apple problem of the prairies and the apple-growing regions. At the present time apples of the cooperative market are sold wholesale through competitive channels, and their thinking has been along that line. They are a little afraid of making a direct hook-up with us for fear of endangering their present outlet;

but we are working on it and we do feel—we have the break-down of expenses, but unfortunately I have not them here—the apples are handled by too many people, through too many outlets, all of which increases the cost of the article without increasing its utility. I thought that the committee would be particularly interested in this: in Saskatoon on Monday and Tuesday there was held a meeting of our interprovincial cooperatives, which is our super wholesale organization across Canada. Now we have entered into a tentative arrangement with the small fruit growers cooperative in the Fraser river valley and our tentative plans as worked out involve a meeting of the producer cooperative and the consumer cooperative for the joint ownership of the processing factory, with the surpluses going to the producer and the consumer, with a possible third division of the surplus to labour, and through that technique we believe that the farmer will come to his factory, deliver his goods, and the consumer through his organization will come there and get it, and by an observance of that technique we will have eliminated most of the cost duplication, and the cost of handling it, which is at the present time between the price received by the producer and the price paid by the consumer.

Mrs. NIELSEN: In regard to farm machinery, I was interested in the description you gave us of the cooperative machinery company that you are hoping to get under way to deal in machinery. I was wondering if the cooperatives had made inquiries into the new field through which we hope much of our agricultural surplus may be used industrially, particularly in regard to the use of surplus wheat and other products—say those which might be useful in the production of synthetic rubber. There is a field which it looks to me would expand continually and one from which I think the cooperatives could bank on getting very substantial returns. Have you made any inquiries as to the possibilities in that direction?

The WITNESS: At the present time two of our organizations, the Saskatchewan Wheat Pool and the Consumers' Cooperative, through their delegates in annual meeting, have instructed their boards to investigate this and have given them full authority to invest the funds of the cooperatives in plants aimed at the industrial use of farm products. We are making similar investigations into the cost of alcohol; our wheat pool has collected considerable data; and I can only say that we are alive to the tremendous possibilities of that general trend which has been generally described as chemurgy. I think when that development takes place the cooperatives will be there with factories and with technical staff also to ensure that the benefits of that development will go back to the farmers producing the primary products.

Mr. GOOD: I might say that that is being carried out by the cooperative association in Kansas City also.

The DEPUTY CHAIRMAN: Father Coady has a few things he wants to say in respect to the briefs which have been presented to us this morning.

Father COADY: I come from Maritime Canada and I know that there has been a lot of loose talk in connection with our fisheries. The fishermen down there bring the fish in and sell it round. Now, that fish is brought in and filleted and it will produce only about one third as much filleted as compared to the round fish. For the round fish the fishermen get two cents a pound and the fillets sell for somewhere around 24 or 25 cents a pound. Now, the tendency is to say that there is a spread of 22 or 23 cents simply because the fishermen only get 2 or 3 cents a pound for it and the fillets sell for the prices at which they do. I just refer to that because there is a lot of loose talk about it.

Now, in connection with cooperative production schemes I can give you one specific instance where in eastern Canada a cooperative has raised the price of canned lobster from 6 cents flat to a price on live lobster ranging from 9 to 19 cents. That was in 1935. Harbour Boucher had a cooperative cannery where

they handled live lobsters. In 1935 the fishermen were getting on an average for the whole season 19 cents for live lobsters and 12 cents for canned lobsters. Right across the bay at Ballantyne's Cove they were getting 6 cents and 9 cents. That was the price set by the old packers. In other words, under the same conditions with expensive transportation they were going to Boston. It is pretty expensive business to transport live lobsters to Boston. The cooperative was able under the same circumstances to give the primary producer 10 cents a pound more on his product for live lobsters and 6 cents a pound on canned lobsters than the competitive enterprise was doing, so it cannot all be explained away by expensive transportation and distribution costs because those are facts. The consequence of that was that the people in Ballantyne's Cove formed a cooperative because their friends right across the bay had demonstrated that.

Mr. HILL: I think perhaps Dr. Coady got the wrong impression of what I was trying to prove, that in the processing the cost of transportation should not be included if you are trying to make the argument that processors get more than producers. I am very much in favour of the producers, but what I am trying to say, and I have said it repeatedly in this committee, is that we have got to find some cheaper way of distributing goods in Canada than has been employed in the past, that they must reach the consumer. That has always held up the delivery of goods across Canada to different places and was one reason for the depression. You could not get the goods to the people at a reasonable cost, and our cost of distribution seems to be very heavy both in the United States and in Canada. That is something that this committee must deal with, and I am stressing it again. I just stress it from my point of view again that the cost of distribution is heavy and that is shown up again in this very statement by Mr. Fowler. That is something I want to impress on this committee because the cost of distribution must be taken into consideration by this committee.

The DEPUTY CHAIRMAN: It is now 1 o'clock and it is our custom to adjourn at 1 o'clock. Shall we meet to-morrow morning at 11 o'clock in this room?

Mr. MACNICOL: I have some questions to ask of Mr. Fowler.

The DEPUTY CHAIRMAN: It is understood that Mr. Good and Mr. Fowler will both be here for questioning. Copies of Mr. Fowler's brief are in your possession. Following the conclusion of questioning, Rev. Dr. Coady will make a presentation.

Mr. HILL: There was a question that Mr. Wood wanted to ask. I think perhaps you have overlooked that.

The DEPUTY CHAIRMAN: Would it be convenient to-morrow morning?

Mr. WOOD: I would not want to take up the time of the committee now, at adjournment time.

The DEPUTY CHAIRMAN: Would it be convenient to-morrow morning?

Mr. WOOD: Will the same witnesses be here?

The DEPUTY CHAIRMAN: Yes. Mr. Good and Mr. Fowler will both be here to-morrow morning.

The committee adjourned at 1.05 p.m. to meet again on Thursday, May 13, at 11 o'clock a.m.



v. Doc.  
an  
com  
R

Canadian Re-establishment  
April 1943

SESSION 1943  
(HOUSE OF COMMONS)

(SPECIAL COMMITTEE)

ON

(RECONSTRUCTION AND RE-ESTABLISHMENT)

MINUTES OF PROCEEDINGS AND EVIDENCE

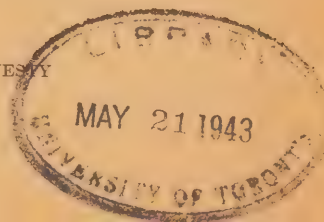
No. 12

THURSDAY, MAY 13, 1943

WITNESSES:

- Rev. Dr. M. M. Coady, Director of Extension Department, St. Francis-Xavier University, Antigonish, N.S.  
Mr. W. C. Good, President, Co-operative Union, Paris, Ont.  
Mr. H. L. Fowler, Secretary, Co-operative Union, Regina, Sask.

OTTAWA  
EDMOND CLOUTIER  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1943





## MINUTES OF PROCEEDINGS

THURSDAY, May 13, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11.00 o'clock, a.m. Mr. J. G. Turgeon, the chairman, presided.

The following members were present: Messrs. Bertrand (*Prescott*), Black (*Cumberland*), Castleden, Eudes, Ferron, Gillis, Gray, Hill, Jean, MacKenzie (*Neepawa*), Mackenzie (*Vancouver Centre*), MacNicol, McDonald (*Pontiac*), McKinnon (*Kenora-Rainy River*), McNiven, Martin, Matthews, Nielsen (Mrs.), Purdy, Ross (*Calgary East*), Sanderson, Turgeon, and Tustin—23.

Rev. Dr. M. M. Coady, Director of Extension, St. Francis-Xavier University, Antigonish, N.S., was called. He presented a brief on the co-operative movement, addressed the committee, and was examined.

Mr. H. L. Fowler and Mr. W. C. Good were recalled and further examined.

Mr. Wood, M.P., Mr. Noseworthy, M.P., and Mr. Adamson, M.P., by leave of the committee, examined the witnesses.

Mr. MacNicol moved, seconded by Mr. Castleden, a vote of appreciation of the splendid presentation made by the witnesses.

The chairman conveyed the thanks of the committee to the witnesses and they retired.

The committee adjourned at 1.15 p.m., to meet again at the call of the Chair

J. P. DOYLE,  
*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

May 13, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11 o'clock a.m. The Chairman, Mr. J. G. Turgeon, presided.

The CHAIRMAN: Our next witness is Rev. Dr. Coady who, as you know, is director of the Extension Department of St. Francis-Xavier University, Antigonish. I am going to suggest that we permit Dr. Coady to give his evidence sitting down, rather than asking him to stand. If any one cannot hear him, I know that all he has to do is say so and he will be accommodated. When Dr. Coady is through, the meeting will be thrown open to questions. I understand that the chairman yesterday, when I was out, told Mr. George Wood, the member for Brant, who is not a member of the committee, that he could ask some questions to-day. Mr. Wood has just told me that he will wait until Dr. Coady is finished and then ask his questions. Naturally, if any members of the committee should want to ask questions while Dr. Coady is proceeding, they have that right. But apart from that, if we can get his brief on the record, we may be that much further advanced.

I will now call on Dr. Coady.

Rev. Dr. M. M. COADY, Director of Extension Department, St. Francis-Xavier University, Antigonish, called.

The WITNESS: Mr. Chairman, ladies and gentlemen, my evidence will be given in two parts. First, as I was requested, I shall give the story of the cooperative movement in maritime Canada. Then I shall wind up this evidence for the committee. With your permission, I am going to sit down to read this first part of it.

### REHABILITATION AND RECONSTRUCTION IN THE MARITIME PROVINCES THROUGH ADULT EDUCATION AND ECONOMIC COOPERATION

The idea seems to be abroad that reconstruction is a problem occasioned by the war. We in the Maritime Provinces believed for a long time before this war that social reconstruction was necessary. The war will unquestionably give us a problem of rehabilitation. But it does nothing more than accentuate the necessity for reconstruction. It is pretty certain that if the war had not come we would still be in a depression. The preparations for this war that went on in various parts of the earth in the late thirties relieved the depression. The actual declaration of war in the whole world has made the economic system work. As a matter of fact, it never worked better than it has during the last few years. The fact that it took a war to do this, however, unmistakably points to the necessity of reconstruction. How this is going to be done is just as important as the doing of it.

The purpose of this brief is to point out how adult education and economic cooperation can be an instrument of this reconstruction. We wish to take it out of the abstract and talk in concrete terms of what this double instrument has done and can do in at least one Canadian zone, the Maritime Provinces.

Maritime Canada has a little over one million population, roughly about one-tenth of Canada's people. It is important to note the vocational complexity

of this zone. Forty thousand fishermen, or about one-fifth of the population, live in little villages on the eight thousand miles of our coastline. Our two greatest industrial groups are the coal miners and steel workers, about 15,000 of the former and 10,000 of the latter. About 45 per cent of the population of these provinces are engaged in mixed farming. It will thus be seen that eastern Canada is economically the world in miniature, with a distinct preponderance of primary producers. This is a characteristic, perhaps, of Canada as a whole. We can say that at least one of our great possibilities for future development is the fact that we have unexplored or partially explored territories. We shall have to bear this in mind when we talk of post-war reconstruction. The neat little formulas that might apply in highly industrialized countries with concentrated population may not be so applicable here in Canada.

In 1928, the Extension Department of St. Francis-Xavier University, Antigonish, was opened. The purpose of this department was to organize the people through a scheme of adult education to reconstruct their lives. It will be remembered that this was a time of so-called prosperity. There was not much prosperity in the Maritime Provinces, however. The old system was not working for the people of these provinces. There was no inkling in those days of the great revolutions that were in the offing. Any change that was to come about in the social and economic condition of the people would have to be effected by enlightened action on the part of the people themselves. Adult education was, to all of us, the scientific short-cut to social change or reconstruction. It was plain also that economic cooperation had to be a part of this educational programme. Cooperation is of the very essence of education. Education gives life. If it gives complete life, then it must give economic life which is the material basis of all cultural and spiritual life. All education does is to open up the human mind to the possibilities of life. It also gives the techniques by which these possibilities can be realized. The whole process supplies the dynamics for the necessary human effort to apply the techniques for the achievement of the goal which is life. The slightest consideration on the part of the people reveals the fact that there are two possibilities for economic betterment. One is the development of individual efficiency that enables people to get the most out of life within the present framework of society; the other is the possibility of group action in the economic and social field. In other words, enlightenment will reveal to the people that they can do things as groups which they cannot do as individuals. Hence they are driven to economic group action, or what we call economic cooperation. The opponents of such action must admit at least that it is a possibility for the people. They must admit, furthermore—especially in the light of yesterday's evidence—that it is more than a possibility. It has been successfully applied in many parts of the earth.

We have tried out this scheme of education and economic group action in the Maritime Provinces in four main fields of activity:—

*Stores.*—The first field is that of merchandising. Some cooperative consumer societies were already in existence before the advent of the St. Francis-Xavier Extension Department. There are 109 cooperative stores in eastern Canada to-day. Most of them have come into being in the last ten years. It may be noted that there are not 109 consumer societies. Some of the societies have several stores, but all the stores are in different communities. Last year, these consumer societies did a retail business of four and a half million dollars. Feeding these consumer institutions is a Maritime cooperative wholesale, called the Canadian Livestock Cooperative Limited, located at Moncton, N.B. This has two branches, one at Antigonish, and one at Sydney, Nova Scotia. The total business last year was \$1,820,000. It is the intention to build up regional wholesales affiliated with the central at Moncton to cover the whole Maritimes. When

this is done, and even before it is done, the common people of eastern Canada can operate manufacturing plants of various kinds to produce the goods for these retail institutions. It would take only a comparatively few years to cover the Maritimes with this network.

*Credit Unions.*—Simultaneously with this development in merchandising has come group action in the field of money. This is done through credit unions. There are 386 of these in eastern Canada at the present time. They have assets of about two million dollars. This is only a small development, but it is potentially great. Not only can the present credit unions be expanded in the work in which they are now engaged, but a long term credit association can be created also. We know the techniques by which this can be done. This long-term credit is more important for primary producers and workers than even short-term credit. The lack of this long-term credit in the past has been more responsible for vacant farms and decaying fishing villages and slum conditions in the towns and cities of eastern Canada than any other single cause. The people also can apply group action in the field of insurance. This is a luscious field. Group action in this field would give them a new share of the national income.

*Processing Plants and Marketing Organizations.*—One of the notable developments in eastern Canada in the last decade or so has been the development of organized marketing and processing. The St. Francis-Xavier Extension Department has worked with the Departments of Agriculture and Fisheries in promoting this kind of group action. The progress of the lobster fishermen is most worthy of note. A large number of cooperative groups, owning thirty-seven lobster canning plants have been doing an annual business of over a million dollars in canned and live lobsters. A large volume of cooperative business is also done in the processing and marketing of other fish, such as mackerel, smelts, cod, swordfish, oysters, and salmon. It is quite possible that in a few years the fishermen of eastern Canada will process and market nearly all the fish in these varieties. This procedure has given the fishermen a greater share of the consumer's dollar. But it has done something more than this. It has given them a sense of mastery of their own fate; it has conditioned them to do other things and in a general way to rise to the full stature of citizenship.

*Services.*—In addition to the purely economic activities referred to in the previous sections, there is a growing cooperative movement in the field of services. This is manifesting itself in health and housing. Already six groups of Nova Scotia industrial workers have completed housing projects and the seventh is under way. Over eighty houses in all have been built in this way. These are inexpensive, yet modern and convenient homes. Seventy-five per cent of the money for their construction has been loaned by government agencies. It is possible for the people themselves, through long-term credit associations, coupled with cooperative insurance, to use their own money for this laudable purpose. The success achieved by the groups that have already tried this out is stimulating the imagination of all the people. It may be the spark that will set them off to a great re-housing movement.

The most promising and at the same time the most significant of all the cooperative movements in the Maritimes is the health movement. As has already been stated, cooperative activities of a purely economic kind condition the people to the point where they are able to do other things of a more cultural and spiritual nature. The economic foundation that has already been laid in eastern Canada paves the way for a great cooperative health movement. This originated with the people themselves. Groups of people who had felt the disastrous effects of the depression after 1929 and who had established successful

cooperative stores, began to think of health. The store would pay for medical services for its members. The first community to do this was St. Andrews, Antigonish County, Nova Scotia. This community has had a very successful cooperative store. It entered into an agreement with the local hospital whereby each family member of the store would get twenty-one days of free hospital service and the store would pay for it. It cost the store twelve dollars per family, and six dollars for an unmarried member. During the last year, a group of progressive citizens connected with the Maritime Hospital Service Association, Ltd., succeeded in getting a law put through the Nova Scotia legislature creating the Maritime Medical Services. According to this scheme, the plan outlined above, which was put in operation by St. Andrews, would be made available to people everywhere in the Maritime Provinces. The prospects for the quick, universal application of this scheme are bright. It is the intention to extend this cooperative idea to the medical as well as the hospitalization end of the health problem. It is estimated that this can be done for an extra two dollars per month per family. This will give almost complete medical and hospital service. The people themselves are doing this and it is not costing them anything. They are creating cooperative institutions that will take care of this. When cooperation is fully developed it will do much more than take care of health. It will give luscious dividends besides.

This scheme of health insurance is cited as an illustration of what can be done by the people through cooperation. We know that at the present time there is a national governmental health scheme in preparation. It calls for the expenditure of huge sums of money. It would seem that the cooperative way would be preferable. It will attain the same objective, do it much more cheaply than it could possibly be done by the state, and at the same time leave the people free. There is no question about the fact that the state should do certain things in regard to the health of its citizens. There are certain social minima that the people must have. But let us emphasize minima. There should be also certain maxima which the people should enjoy and the maxima refer to freedom . . . liberty of the citizen to work out his own destiny in society. There should be no objection to cooperation. It is in line with the much-trumpeted philosophy of competition. Let us have competition, competition between competitive and cooperative institutions; and let the better institution win. That is all we ask. The trouble to-day, however, is that competition has largely disappeared from the face of the earth, and economic dictatorship has taken its place. We are in the grips of monopolistic capitalism. Not only that, the cooperative way of life is opposed also by many groups of our citizens who are in alliance with these monopolistic vested interests. Our supposedly free institutions also are more or less committed to the status quo.

It may urged that the cooperative movement here in Canada is so small that it is not worth considering. We would submit that any movement is as big as the idea behind it. Science does not put any stock in this kind of argument. The scientist figures out what can happen in the future. He predicts and that is why he is a scientist. There was a time when we had no electricity, no aeroplanes. But the scientist did not succumb to the idea that because we did not have them, therefore we could never have them. If the people of Canada really wanted the cooperative way of life, they could have it. If we believed in it as sincerely as we believe in the necessity of supplying guns, ships, and planes to win this war, the whole of Canada could be cooperatized in ten years. We would then have a scheme that would distribute wealth in a new and undreamed-of way. Not only that, it would create wealth too, because it would promote production and increase employment. The trouble is that sectors of the Canadian people do not want this. They want reconstruction within the present framework of society. They want to change Canada and not change it at the same time. This is to take a superficial and unscientific position. We must change our

social and economic set-up to the extent that is necessary to give the abundant life to the people. That can be done in an evolutionary way, in a way in harmony with the traditions of our British democracy. Cooperation will do it.

The good thing about cooperation is that it does not imply that we are going to be too much in a hurry about reconstructing society. We all have inflated ideas to-day. We think that it is imperative that the good society should emerge immediately after this war. We think that it should come full-grown out of nowhere as Venus from the seafoam. There is a great danger in this attitude. We cannot skip intermediaries in social evolution any more than we can in the world of nature. History does not testify that any people ever suddenly developed a great civilization. There is a danger that we may not have the money to carry out all these grandiose schemes. It would be much better to proceed slowly. Let us do first things first. If the governments of this country have millions of money to throw around, they could use a few of them to mobilize the people of Canada for enlightenment, organize them to study, equip them with the essentials for social progress, and let them go. They will work out their own destiny.

Let us give an illustration of what cooperation on all fronts can do for the spiritual regeneration of a community. We will take a fishing village for this illustration. There are many which we might choose; we will pick one from the northeast coast of New Brunswick, where cooperative activity has made great progress in recent years. This is the story of Point Sapin, a lonely fishing village on the east coast of New Brunswick, fifteen miles from Baie Ste. Anne, on the Miramichi River. Attracted by the rich fisheries and fertile soil, people settled there many years ago. It now has 105 families. They built a church but had no resident clergyman. They were serviced by the priest from Baie Ste. Anne, who had to come to them eighteen miles over a lonely road through a deep forest. In the winter time they were sometimes cut off from all communication with the outside world.

The workers of the St. Francis Xavier Extension Department met these people for the first time in 1935. At this first meeting it was discovered that there were only twelve people in the community who were economically free. The rest were indebted to dealers and merchants and did not own even their boats. In 1937, the work of educating these people began. The twelve free men formed an association and borrowed \$2,000 from the New Brunswick government to enable them to hire a lobster factory for that season. Only six boats fished for this cooperative. At the end of the season, after paying the regular price for lobsters, they had enough money left over to pay back the government loan. But they asked permission to hold it for a few years so that they could buy a factory. A few years before this there were six lobster factories at Point Sapin. They were owned by outside companies who came in for the lobster season with their boats, their traps, their crews, and even their cooks. They made their big haul and then went away. The people at Point Sapin were content to work as hired hands for these companies. By 1942 there were two factories, one the cooperative with 40 boats, and the other was an old-line factory with only six boats.

Thus, in six years, the situation was reversed. In 1941 the cooperative lobster factory did a business of \$38,000. In addition the fishermen engaged in new ventures such as the production of pickled mackerel and cod. Cooperatively they bought salt, flour, and vocational goods. In the meantime they discovered that they had other assets in the community. They had great cranberry and blueberry areas. They formed cooperatives for both of these and did a yearly business of about \$5,000 in each of them. Last year they did a total business of \$50,000. They now have their own truck and assets of \$3,000 in their credit union. They are planning to open a cooperative store in the near future and to expand their operations to include still other lines of fish. They are also making arrangements to electrify the community and have a big programme for the improvement of their homes.

The success of these economic ventures stimulated the people to build up their community culturally and spiritually. In 1940 they got a resident clergyman. He was the man who had helped them out in all their struggles. He now pitched into the work of educating the people and developing their cooperatives. They were glad to have him come and in the midst of their other labours built a house for him which cost \$4,000. Elated over the success of their cooperative ventures, they built a convent, costing \$8,000 and brought in an order of teaching sisters. At the same time they built a beautiful new school with two departments and an auditorium. I may say a year ago they were on the road where in six months they would have all these things paid for. Heretofore they had had school only intermittently, and as a consequence a large percentage of the people were illiterate. The sisters immediately started a vigorous programme of education. They not only carried on formal education in the school but started an adult programme as well. A night school for illiterates was opened. In 1941, sixty adults learned to read and write. The young women were taught handicrafts and home economics. The people were taught music, and for the first time, Point Sapin got a church choir.

The people of Point Sapin have a new spirit today. They hold their heads high. They are not only enthusiastic about the many things they have done, but they are thrilled with the fact that they could be done in such a short time. They have great visions for the future. They see that the great natural wealth that God put around about them everywhere can be turned to the use of man in his climb upward to the stars. This community is potentially great. Its population will grow rapidly, and with all the modern technological achievements of our age, Point Sapin can grow in culture and goodness.

Do you want me to go on and finish the brief?

The CHAIRMAN: Would anybody like to ask Dr. Coady any questions, or do you want him to finish the brief?

Some Hon. MEMBERS: Finish the brief.

The CHAIRMAN: I think you had better finish the brief, Dr. Coady.

The WITNESS: In the second part of my presentation I am supposed to start to wind up the evidence presented by our committee.

I would say first of all in this last section that I think I can take it for granted that we all feel that the reconstruction of Canada is a serious thing and that there is no Canadian worthy of the name who would take this great problem lightly; but if we are patriots at all, we will weigh well and consider profoundly the things we are going to do, and we will not rush off and do foolish things. What we do in the next ten years will determine, probably, the history of Canada for a long time.

In connection with this brief we are presenting on cooperation, I want to point out first of all that it is possible the great big black cloud that hangs over human minds from the beginning of time is the inability of man to see the things that are not. We have eyes and see not, and ears and hear not. That is one of the great difficulties in our work and it is one of the great difficulties of the world. You may recall having read in the Reader's Digest a few months ago a story about the aeroplane. That story stated when the Wright Brothers developed the aeroplane and proved to their own satisfaction you could fly an instrument heavier than air, and practised in the pastures of Ohio, they wrote to the departments of the navy and the army in Washington indicating that this new instrument might have some significance in a military way. They did not get an answer for two years. They went down to Washington, crashed in the door, and were finally told by heads of both departments that they thought it had no military significance; and that is yesterday. That is, we are all afflicted with that blindness. We can see the things that are, but we do not see the things that are not. The first thing

we have to get into our minds is the possibility of things, whether it be new or whatever it might be. We have to make the Canadian people first see the possibilities of life in this great land. When they see the possibilities of life and the possibilities of realizing that life then probably they will put forth the effort to achieve those possibilities.

Yesterday you saw in the evidence given by Mr. Good and Mr. Fowler the story of what the common people did in western Canada and other parts of the earth. I have been told many times—and looked upon with compassion—that cooperation, after all, is a pin affair, and they are rather sorry for me. My friends do not think about it; they state, "You cannot do more than pin stuff anyway." Mr. Fowler gave the story yesterday of cooperation in oil. I suppose oil of all businesses is the most modernistic. They take crude oil from the earth, process it and manufacture it, wholesale it and retail it, and that is a fairly modern bit of business. The common people of Regina did that. If they can take oil from the ground, process it and sell it, what is there in business they cannot do? After all, do you not think one of the major mistakes we are making in the world today is we look upon the common people, even in our democratic countries, as something ordinary. While they have the right to have a say in affairs, they have not got the say. We ask the common people of Canada to run Canada, which is the biggest business in Canada. According to our democratic beliefs the people are supposed to run Canada and yet we say they cannot run their own grocery stores.

The first thing we have to get into the minds of the people is the possibility of more participation. The next thing is, is it licit for the Canadian people to get out and form a mutual association and engage in business? I have hunted a long time for any law of God or man against it, and I have not found it. I think it is postulated by British freedom; I think it is synonymous with democracy. Louis Mumford in his book "Faith for Living" says that democracy may be defined as the freedom to form mutual self-help associations.

*By Mr. Martin:*

Q. What was the author's name?—A. Louis Mumford. British freedom gives us the right to say what we like, and do what we like within the law, and there is no law against mutual self-help associations. We ought to remember that and that people have that right. When that right goes, all rights may go.

Now the next thing about cooperative need is this, that it must be a tremendously wonderful thing. You heard yesterday that probably 500,000,000 people on the whole earth are in the cooperative movement. The people represented by that group are amongst the lowly, the most uneducated people in society. If the lowly and uneducated groups of the world's people can carry on economic group action in all these fields, then it must be a wonderful thing. Not only do these uneducated people do this wonderful thing, but they are doing it in the face of bitter opposition from many people in every part of the earth. So when you consider the difficulty of the job the people are doing and the opposition against it being done, it must be per se a tremendously safe and foolproof technique of business.

I want to answer one of the difficulties that is thrown against us, and that is that it destroys initiative and will destroy private enterprise.

Now, there is a tremendous lot of loose thinking and probably almost insincere talking going on about these topics that cooperation is going to put private enterprise out of business. Why, cooperation is private enterprise. What do you mean by "private"? "Private," if it has any meaning, to me is in contra distinction to public, and any business publicly owned means state

owned. Cooperation is not state owned; it is owned by a group of citizens under a charter from the government and in that respect it is not one iota different from a joint stock company or a corporation. The lobster cooperatives in Nova Scotia are as private as the C.P.R. or the Dominion Bridge. But they get the idea that it is collectivist; so it is; so is the C.P.R. We have no store in Nova Scotia that is as collectivist as the C.P.R., probably. People all over the earth own the C.P.R. Modern business, through joint stock companies and other means, is national and international in scope, and it is done through corporations. What does that prove? It proves that these undertakings have come about for the attainment of objectives through group action in the economic field. Group action, which we call cooperation, has come about in the same. It is the same principle.

Now, the next thing business people, the advocates of private enterprise say, "Well, it will destroy initiative, it will destroy private enterprise." Now, there is a lot of loose thinking there too. When people go into cooperatives they go in for a motive, they go in with a proper motive, and that is that they will eliminate profit. That is the difference between them. What do you suppose the people go into the cooperative movement for? If they did not go in for a motive there would be no sense to their going in. Take the illustration I gave yesterday, the lobster factories in Antigonish county, where the price for live lobster was raised from 9 to 19 cents, and for canned lobster from 6 to 12 cents. Do you suppose the people who went into that did not have that in mind? That is one of the motives for going in, the economic motive, to provide for themselves the good things; but there is this difference in the cooperative movement, you do not take the profit from anybody else.

We have got to keep that in mind. That answers all questions of taxation and all these other questions that the press of Canada have been throwing out against us in these recent years.

Now, let us take a fundamental, basic illustration: we have a modern business in a modern rural community of say 200 families. And a young business man, like 10,000 others, starts his little business. As you very well know, some of the biggest economic empires that we have in the world to-day had their start in these little businesses, some young man who starts probably on just a shoe-string; and after twenty years or so makes a great success of his business. Where did he get his money? Not being God he did not create it; he got his money from among these 200 patrons who paid their bills. And now, if he pays any income tax or any business tax, who pays it? Where does that money come from? Not from him; he got it from the people. The people in the last analysis paid that; and his profit, every cent of it.

And now, the cooperatives have the right of doing that, and they have the right of keeping that money. What they pay out in the way of their own personal income tax or in any other way does not matter a great deal. There is the answer to that question; it is the people who pay the taxes.

Now, I want to say just one word further with respect to this question of profit. There is a good deal of misunderstanding about profit. A lot of the things people call profit are not profit at all. When a man runs a business the money which he pays in the way of depreciation, insurance, reserves of various kinds are not profit; what he pays himself in the way of salary, and to his help, is not profit. That is remuneration for his work, his services to society. A man may go out and sell his services to society for \$1,000, or \$5,000, or \$50,000 a year—whatever it may be; if he gives that service to society he is entitled to be paid for it. Profit in the real sense is what is over and above every legitimate charge incidental to providing a service to a community—society. Everything over and above what you pay for the legitimate costs of running that enterprise in the interests of society constitutes a profit. I may be a man of tremendous value and I may be able to sell my services to society and may say that I am

worth \$50,000, and you may give me \$50,000 for my services to society. If I give only \$5,000 worth of service to society then I am getting \$45,000 to which I am not entitled. But usually we see it the other way around, people do not get enough for their services; many business men do not. But the present system affords very wide play to unscrupulous individuals in permitting them to take advantage through interlocking directorates and many other mechanisms which are the fruit of the fertile genius of man's mind; and they can take advantage of that and get a flood of easy money from an unsuspecting people, with the result that many people are able to take in armfuls of unearned income. And, that is what is wrong with it. We have to do something to forestall that. People cannot get something for nothing from society. Under the cooperative method that is impossible, or, almost so. What I mean to say is that it does not matter how high a man's salary is so long as he gives service for it. We have many different classes of men, let us pay them all that they are worth for what they put into the social set-up; but, don't let us have them go out and exploit the people.

Cooperation: I want to say to you that that is implicit in the very idea of democracy. Democracy: the traditional definition of Lincoln says it is rule of, by and for the people. Even that is fantastic for me. What did he mean by rule of the people? Let us break it down. Rule of the people means first, negatively, not rule by some one man or group or class of men. That is the negative implication of democracy. Positively, rule of the people means participation by the people in the social processes. Participation means control of the social forces; whoever controls the forces of society, controls society. That is a common sense, plain, self-evident thing. If you have real democracy then all the people participate in the social processes.

Now, there are about five categories of social processes; first of all on the list you have the material, the economic; then, you have the social, or institutional; then the political, the cultural and finally, you have the spiritual. You have these five categories. The people of North America in the olden days participated in varying degrees in these processes. A hundred years ago we had uppermost in our minds political participation, the franchise; the power to elect the governor, the ruler. We thought we had the world—our ancestors did—when they had that, the right to vote; rule by the will of the governed—the governor rules by the consent of the governed. In the course of the ages, however, we have found that to be more or less of an anomaly, and while we had ostensibly that right there were other things that caused it to slip away from us. True democracy would mean participation in the political, certainly; and participation in the cultural, certainly; in the spiritual, in the economic. You cannot have full fledged democracy with just participation in one social process. If you are going to have full-fledged democracy you must have it in all the categories of processes; and you know as well as I do that the economic is basic, all the rest depend on that. If you give me the financial rule of Canada and I will do all the rest, pretty nearly.

A MEMBER: That is a big statement, I think.

The WITNESS: What is cooperation? The mechanism by which people in our day can participate in the economic processes of society. The people of Canada and the United States are participating less to-day than a hundred years ago, when the whole of society was much more simple and more rural than it is to-day. You have fewer independent owners of land to-day; and to-day you have in the modern world an industrial proletariat, the propertyless worker, the share-cropper and the tenant. We are to-day participating less in democracy as a society than we did a hundred years ago. We have to bring it back and the answer is cooperation.

How are we going to bring back participation? The technique of a hundred years ago will not do it. Trade unions will not do it—that is just grouping for

wages. Here is Canadian wealth, a great big reservoir now filled up to overflowing with \$9,000,000,000; and to tap that your wage-earner has just a little hose. What has the farmer got to tap that with? Well, in order to see what the farmer has you would have to get a microscope to see the small bore in the hose with which he taps that reservoir and pipes down to himself a certain little share of Canada's national wealth. The other classes of society pipe down the wealth from the reservoir in great big hose lines, it gushes out to them, it comes down through business, through manufacturing, through wholesaling, through retail business, through insurance; these big businesses draw by far the greater share from this reservoir. The answer is obvious; what the farmer needs, what the little man needs is a new hose that he can attach to this great reservoir of Canadian wealth and pipe down to himself a greater share of that wealth. And, remember, when they do that they are not destroying wealth, they are increasing purchasing power; and then by a strange law the reservoir keeps on filling up, new wealth is created and there is more for all. That is the problem before us, there is no question about it.

If you ask me what is to be Canada's solution in the post-war world to this problem I say this, give the people ownership. In that way our problems will be solved, and in that way the American people will be able to sing—and our rural people of Canada will be able to join them in that patriotic song of theirs, "My Country 'Tis of Thee." It is not, "My Country" the way the things stand to-day. Then it will be "my country," because I own it; not because I was born here, but because I am given an opportunity of participating in owning it.

We have that technique. There is no need to be frightened about that, gentleman. The greatest difficulty I found in the last twenty years is that people have been frightened by the implications of democracy. Have you ever stopped to think of it? Suppose we do give away all our business through cooperation to the Canadian people? Is there anything terribly wrong with that? We would not be giving it to Japs or foreigners, we would be giving to the Canadian people, our own brothers. After all, is what we have to give away so very much? I think that in our wildest dreams we would not be able to get more than 25 per cent of the business of Canada into cooperatives in the near future; and that would really not mean any very substantial part of our economic life. Give the farmers a chance through economic group action to do certain things for themselves, say 25 per cent or 40 per cent of the nation's business. The 75 per cent or the 60 per cent left would be worth more than the whole 100 per cent would be to-day or than it was in the years of depression. And there is still big room for private business, even when you give to the people their fair share of the country's business. It is not a thing to be afraid of.

It also does many other things; it gives responsibility, it ensures stability and order; and what is more important, it guards against this wild revolutionary stuff. If we could arrange it so that all of the people during the next ten years would have an economic interest in say the little store in every village across the country we would be doing a very great thing.

Now, the next thing is this, does this technique of cooperative business spread honesty and make for decent citizenship? Let me say just one word, and you can explain it as you please; we have 386 credit unions in Nova Scotia. We started in 1933; and we had one credit union, the one at Waterford which has a capital of \$120,000 to-day, and it has loaned over three-quarters of a million dollars to these people since it started. I think they started in 1935 or 1936—and they have never lost one five-cent piece in all that volume of business. Explain it—I do not know how to. Possibly I might suggest that it is but the transferring of Christianity into the economic system.

Then, perhaps there are some other aspects of it which are worth considering. There is this aspect of it, that we are in this country in the midst of a great experiment. We are moving many peoples of many races into a common citizen-

ship. And now, I would suggest to you that this whole thing is designed to develop a decent citizenship, to develop honesty, justice, and respect for things that are right. And that is a foundation to build on. That is on the moral side. Let us take on the community side; we in Canada are a mosaic of people. We have many races and many religions, and we have a lot of divisions; we have the possibility of a lot of trouble. But surely there is none of us so superficial here to-day that he cannot realize that we are in a battle for democracy. If we are fighting to enable peoples of different races and classes to get along in other parts of the world then I suggest to you that it is up to us to solve our problem here first. We have a problem to solve, and we have to get along under the conditions with which we are faced. We need a new synthesis here in Canada, we need new loyalties; to weld out of all these different peoples of different racial origins and different religions, a citizenship that is Canadian, a great Canadian civilization. We have great materials to use in accomplishing this end. We have the many philosophies of all the different people and of all these different classes. The Swiss did it; we can do it. In this cooperative business one of the first principles is neutrality in politics, religion and nationality; i.e., a man is taken into a cooperative movement irrespective of race, religion or class, and without regard to politics. In it we have a common denominator. It lays the foundation for that unity which we need. When men do business together and come together as friends to do the ordinary things of life they learn the lesson of brotherhood and we become really united.

The next thing that I want to point out is that we have to have a sense of mutuality. It was said yesterday that "nature is red in tooth and claw". This is the doctrine of the survival of the fittest, that the characteristic of all nature is fight. That is a lie. Nature at its best does not display that instinct as much as it displays the cooperative instinct. You have got nature at its best in the human family, the father and mother and brothers and sisters. They are cooperative rather than mutually destructive. They are not chisellers, gougers or exploiters among themselves. It is all for each and each for all in the human family where you see nature at its best. Even the black sheep, the prodigal son who goes out and dissipates himself and his substance is taken back. They are not proud of him but they will pray for him, they will take him back for he is theirs. Cooperation is the technique that will make a family of a community. The instinct of cooperation that you see exemplified in the human family will come about in the community. Cooperative communities will make the nation a family, and cooperative nations will give the idea of the human family established on the fundamental principle of fellowship on a material basis in the world. Otherwise I do not see that there is very much hope for that universal peace and brotherhood of man.

We have to change our views and we have to come to the point of doing it now, to love our enemies, the black sheep of the human family, certain nations that have committed tremendous wrongs against the world. It is hard to love them but the day will come when we will be able to do that just the same as in the family. After all in the family you are not proud of the son who went bad but he is your son and you will take him back. We should not be proud of these anti-social nations. We are not proud of them. We are sorry for them and if we are properly motivated we will take them back.

There is just one thing with which I want to close, and that is this: as far as we are concerned I think we should not be afraid of the implications of democracy. We should let our philosophy work itself out and not be afraid of our beliefs. There are two things that ought to be done. One is that people should be mobilized to study and to think, to get enlightenment, and the other is to give them a fair chance to explore all the possibilities that lie before them. This country gives the people the right and protects them in that right to go out and do anything they have the ability to try. All right; let us give the people

of Canada the opportunity first of education and then the freedom to go out and explore possibilities as individuals or as groups and we will have a progressive society and we will have established democracy in our land.

The CHAIRMAN: Dr. Coady, I am sure that every member of the committee is deeply indebted to you for your presentation, and that all those who are here who are not members of the committee also feel under obligation to you. The presentations of this group are completed and the meeting is open for questions as the members of the committee wish. For a while yesterday I was not here and the vice-chairman, Mr. McNiven, presided and he told me he had promised Mr. George Wood, who is a member of the House but not a member of the committee, that he would have the privilege of asking some questions the first thing this morning. I suggested to Mr. Wood that he might wait until the evidence was all in, and if it is your feeling that it should be done I would say that Mr. Wood might ask his questions now and then we will be open for questions from others.

Mr. WOOD: Mr. Chairman, I do thank you for this opportunity. I might preface my remarks by saying I have always had a deep interest in co-operative enterprises. I have had some experiences, and sometimes I have had experiences that were such that I had occasion to change my mind on the principle of co-operative enterprises with regard to some particular things. I may say with regard to some of the questions that I wanted to ask that I am prepared to say that Dr. Coady has more or less answered them. That is not saying that the answer is satisfactory but at least I have his philosophy in those answers but with your permission, Mr. Chairman, I will still put these questions as they appear to me to be very vital in regard to exchanging the co-operative method of society for the competitive method. The first one would possibly be best answered by Mr. Fowler. Will I give all the questions?

The CHAIRMAN: I would suggest that you might give each question. How many have you?

Mr. WOOD: There are about four. I think I should give the questions and let whichever one answers who sees fit. In view of the possibilities suggested by Mr. Fowler of the co-operative system in relation to the oil industry, to what extent should the profit motive system or private or corporative system be given credit for pioneering and laying the foundation for making that success possible by co-operation?

The next question is one which I think was partially answered by Dr. Coady. Would not the co-operative system give its best contribution alongside the profit motive system by using co-operation where it may improve business methods?

The third question I think will probably be more in Mr. Good's field. Do you believe as co-operative enterprise lends itself to satisfy the more placid minds of the nation that the aggressive minds should not be allowed to pioneer and explore in the fields that are undeveloped?

Dr. Coady more or less answered the next one. Can either system give service to society without taking into consideration the spiritual life of the nation?

The CHAIRMAN: Mr. Fowler, do you wish to answer? You might come up here.

Mr. FOWLER: This presentation on behalf of the co-operatives is from across Canada. We had little or no conference between groups and it is rather significant that dealing with the question of profit both the reports of Dr. Coady and myself made the same statement that we were attacking profit in terms of that which was left over after reasonable deductions had been made for services rendered. That implies the co-operative movement does not wholly condemn all of the competitive or capitalistic system as it exists to-day. We are attacking only the evil portents of that system which means specifically, to answer the question,

that we do recognize and do admit the pioneering that has been done and the research that has been done even though it has been done through a selfish motive. We do recognize that as a contribution made to human society by this system that is the dominant system to-day. I have said before audiences many times that if the economic system we have to-day had not run rampant, had been fair to all groups, the co-operative movement never would have been born.

The CHAIRMAN: There was another question asked of Mr. Good, I think.

Mr. GOOD: Mr. Chairman, I think that Mr. Wood's question can be answered in two directions. He referred to the opportunities which so-called private business gives to aggressive temperaments and individuals. In the first place I would not admit that co-operative group action gives any fewer or lesser opportunities for aggressive pioneering in spirit and in action than any private business we have ever seen. I know there are in the development of co-operative group enterprises tremendous opportunities for the very best leadership, for the very greatest of venturesomeness, if you like, for people of imagination and of the pioneering spirit. For example, take Dr. Coady and what he has contributed in Nova Scotia. Has that involved nothing in the way of imagination and aggressive action and thinking? Take the work of Mr. Howard Cowden in the middle west. There is no American businessman who has made a greater contribution in industrial pioneering than Mr. Cowden. He has had imagination and he has had not recklessness but the capacity to go ahead and embark on ventures so that in that particular respect I would not admit that there is anything to be said in favour of so-called private enterprise, either individual, partnership or joint stock corporation. There is nothing in that which offers greater opportunities for leadership and imagination and pioneering work on the part of individuals than the co-operative movement offers.

You can go any place in the world, China, the British Isles, the United States, Canada, South America, in small communities and in big communities, and you can find people of tremendous force. I listened last fall to one of the higher educationalists of the United States speaking of a trip he had made to South America. He was dealing with what is being done quite recently in some of the remote schools of South America in that semi-civilized country in the way of developing cooperative attitudes and cooperative technique. It was tremendously impressive. Here are people of wonderful character working in remote places. That is my answer to the first angle.

The other angle is this; there is something to be said for the venture some individual in industrial pioneering who risks far more than he will ever get. I think the gambling spirit is inherent in humanity. People of a certain temperament like to run risks. Some of those risks are risks in useful pioneering work. For instance, the average prospector never earned an average wage. He got his satisfaction in the imagination, in the risks that he was undertaking. It has been said—and I think quite correctly said—that there is a field for the man who wants to run high risks, for the group that wants to run high risks, which cooperative groups do not usually feel they ought to run. There is a field for that. What the extent of that is I do not know but I think it is growing smaller. I am not out to put any limitations on individuals or groups of any kind. I do not like the joint stock structure at all. I do not like its practice; I do not like the rules. I think it tends towards anti-socialism but I am not recommending anything of a legal character to cripple them in any way. This gambling instinct may be a useful factor in certain fields of human activity and I am not out in any way to hamper it but I would suggest most definitely, Mr. Chairman, that even in that respect where cooperative groups have become strong and have large financial reserves that they do undertake pioneering work. The Scottish Cooperative Wholesale has recently undertaken very interesting

pioneering work with the travelling shop in the remote districts of Scotland. They have undertaken many ventures in new fields where they have felt strong enough. A private merchant might undertake the same sort of thing. Cooperative groups under certain circumstances do that kind of thing, have done it and will do it in the future. I cannot see on balance that there is anything that might be said in favour of encouraging the so-called private system of business. I do not like those terms. We use them with certain reservations. There is nothing can be said on balance to encourage that as against the other, and there are the ethical implications of the cooperative movement which work so much the other way. All kinds of gambling have very serious moral implications. We had better bear that in mind from the highest point of view that even in business gambles I do not think that humanity should encourage that instinct.

Mr. McNIVEN: Mr. Good, having run these very great risks such as the prospector and the oil driller do would you say they would be entitled to returns commensurate with those risks?

Mr. GOOD: So long as the Canadian people collectively permit that kind of thing they must permit the individuals to reap the rewards of their gamble. The only alternative is to establish such a system of control which will take away, not the risk, but the prospective gain, and you cripple a man; you do not give the same incentive. The incentive is not given, because you take away the prospective huge gain. Now, personally, I have never been of the opinion that on balance our system of mineral development is wise. I think that state action in the field of mineral development is better, on balance, but we have secured a good deal of pioneer work in the field through the prospect of great gain driving people to make explorations and that sort of thing. However, it is a difficult question. There are a lot of angles from which to view this question. I am not out for anything in the way of drastic change, although, personally, I think the preference is towards, if you like, collective state work such as we are now doing. The Department of Mines is doing a vast amount of exploration work in the mineral field under state auspices. Put that over against the private prospector and we have to balance both ways. You may say that it costs more to do it through the state and that the prospector will do it more cheaply.

Mr. MACKENZIE (Neepawa): The state is not attempting development.

Mr. GOOD: Only exploration.

Mr. MACKENZIE: Yes, and it is only on a very small scale, too. That is where the difficulty comes in.

Mr. GOOD: When you have once discovered where the stuff is and measured it by drilling and so on, it seems to me that the less risky part is to follow it through.

Mr. MACKENZIE: But they are never sure.

Mr. GOOD: I know that. This is a huge question. I think there is a lot to be said on both sides.

Mr. MACKENZIE: You can imagine a case where the state develops something that turns out to be a frost; what would happen then?

Mr. GOOD: There is possibly a field, at any rate, where private enterprise should be permitted to be maintained. I cannot imagine any society where we should put the shackles on individuals. There are certain individuals in specialized lines and we should give the utmost liberty to those individuals. There is probably the prospect of very large gain, and the line of division would have to be drawn, but where that line should ultimately be drawn is a matter we will have to work out by experience.

Mr. MARTIN: Dr. Coady, you told us there were 330 credit unions in the maritime provinces, or in eastern Canada. I wonder if you could give

us a picture of the number in the country and their character—I mean for fishermen, farmers, workers, office help, and so on—could you break that figure down?

The WITNESS: No, I cannot. Approximately, the industrial areas are more highly organized than the rural areas, but they are practically universal now. It can become universal in a very short time.

Mr. MARTIN: The administration of your credit unions is based upon the experience in Boston, is it not?

The WITNESS: That is right.

Mr. ROSS (Calgary): I know something of what Mr. Fowler has been building up in Saskatchewan; he has done very excellent work there, largely as a result of his own capable efforts. I have known him for many years and he is very capable and has done very efficient work; but there were a few things in his address yesterday that I should like to ask him a few questions about. In the first place, Mr. Fowler, you get your money to start the co-operatives through the sale of shares, I believe, to the farmers and others throughout the district?

Mr. FOWLER: That is right.

Mr. ROSS: And you sell your produce to your members?

Mr. FOWLER: Yes.

Mr. ROSS: Do you also sell to strangers?

Mr. FOWLER: To get the picture properly before you, referring particularly to refinery products, those products are distributed through organized co-operatives and they are organized by securing capital from their members in the community. Going back to the main part of your question, under the Co-operative Act in the province of Saskatchewan, a patron is defined as one who transacts \$50 worth of business with the co-operative, and when he reaches the status of a patron then if that co-operative declares a dividend it must create a dividend for that patron, applying the dividend on share capital to bring him in a state of equality with the other members, and when his shares are paid up, as we say, then he receives his dividend in cash, or he comes in the same as the other members. Essentially the earnings or surplus of the co-operative, under Saskatchewan law—and I think it is practically the same throughout the dominion—essentially the earnings or surpluses of the co-operative go to those who patronize it.

Mr. ROSS (Calgary): But you do sell to non-members? Tourists going through the country and that kind of thing will patronize you and you do sell to them?

Mr. FOWLER: Yes.

Mr. ROSS: And you make a profit on the sales to them?

Mr. FOWLER: Yes.

Mr. ROSS: And the profits you make from sales to them are distributed among your members, I suppose?

Mr. FOWLER: True.

Mr. ROSS: You spoke yesterday of the splendid profits you were making through the co-operative; that you were able to make big savings for your members by your co-operative method. Will part of the reduction in price you are making for your members to-day be brought about by the profits you are making from sales to strangers and others? Would that be so?

Mr. FOWLER: It is quite true, sir, in theory, but in actual practice that type of patronage is very limited.

Mr. ROSS: It is not very great?

Mr. FOWLER: It is limited. As a matter of fact the controlling factor is section 4 (p) of the Dominion Income Tax Act which says that if that class of business is more than 20 per cent of that transacted with members that organization can no longer qualify as a co-operative, and therefore, is put in the class of profit business. I could give you a large number of our co-operatives that refused to do business except with members; but you can see that the actual situation is that the transient individual, particularly in the tourist trade and so on—you were thinking of the sale of gasoline—is not usually one that is attracted to a co-operative station and in actual practice our volume of business to non-members in the oil business is very small. But there are two controlling factors: first, the provincial law says that if that transient does \$50 of business then he must be taken into consideration; and the second controlling factor is the dominion income tax which confines that to 20 per cent.

Mr. Ross: There is income tax if the co-operatives pay income tax; do they?

Mr. FOWLER: As Dr. Coady said, that is a misunderstood term. It is not true in all its implications. Let me put it this way. The surpluses of a co-operative are distributed to its members and taxed in that fashion, and in that particular phase we are no different from the ordinary partnership. In an ordinary partnership, I think it is understool that the earnings of the group are distributed to the partners and taxed as they affect the individual income. In Saskatchewan, the co-operatives are asked by the dominion income tax inspectors to furnish a list of patronage dividends paid, and the inspector checks that list with the income tax returns that have been filed, and many men have come to me and said: My co-operative dividends put me in a class where I have to pay income tax this year, so actually the co-operatives do pay income tax after division. But as Dr. Coady pointed out, in theory, and I think in practice, the actual income taxes are paid by the people anyway rather than by the corporations.

Mr. Ross: In other words, you are incorporated bodies the same as any other company, are you not?

Mr. FOWLER: We are incorporated, yes.

Mr. Ross: And the profits that are made are distributed among your people in respect of the purchases made of your products, whereas in the ordinary company the dividends are paid to those who invest their capital in the company?

Mr. FOWLER: That is right.

Mr. Ross: That is the only difference between the two. The ordinary company pays income tax as a company, and your co-operatives, as I understand, do not pay income tax, but when the dividends are distributed the income taxes are paid by those receiving the dividends; is that correct?

Mr. FOWLER: That is quite correct.

Mr. Ross: The corporate body itself is not taxed in the case of the co-operatives but it is taxed in the case of the ordinary company?

Mr. FOWLER: I think that is true, yes.

Mr. Ross: There is only a tax in the case of the shareholders. Yes, I see. Now, suppose all business were carried on on a co-operative basis as suggested by Dr. Coady—it seemed to be his hope that it might reach that stage—suppose that all business were carried on on a co-operative basis then we would have no income taxes from business at all and the only persons paying income tax would be the wage earners and those who are earning wages and salaries; that would be correct, would it not?

Mr. FOWLER: Yes, I think so.

Mr. ROSS: That would be true. So we would have to look to some other source for our revenue?

Mr. FOWLER: I think the inference would be that the people would be in a far better position to pay the taxes. I think we have only to go back to the period of the last war when there was no income tax and we were able in that period to transact the necessary business of the country through the ordinary means of taxation. The ordinary means broke down and we had to seek new revenues and we sought revenues where the money was and where the money had been gathered by the corporations.

Mr. MARTIN: In that observation are you not overlooking the heavy debt that was created and the necessity for borrowing?

Mr. FOWLER: Definitely, there was a greater need for money. Our premise is that if the people had the money which they created they could pay all the taxes, and Dr. Coady brought that out.

Mr. ROSS: Do you know whether or not the English Co-operatives pay the income tax or whether the Swedish Co-operatives pay it?

Mr. FOWLER: I see there is a solicitor from Saskatchewan here and he is better able to answer that question than I am. The present law in Great Britain is that those portions of the surpluses of co-operatives which are returned as patronage dividends are not taxable. If they pay interest on capital and so on that portion of their surplus so paid is taxable. Their patronage dividends are exempt in Great Britain.

Mr. CASTLEDEN: I wish to ask a question. I believe that the matter of taxing the co-operatives has been sent to the courts and has not been finally settled. Would the taxes of co-operatives as corporations concern the expansion of co-operatives?

Mr. FOWLER: That is a rather difficult question to answer. Essentially, co-operatives are non-profit organizations. We operate—we use the phrase—on a going price because it is not possible to estimate the actual price until after the end of the fiscal year. In theory possibly we should operate by estimating our costs or immediately lowering our prices. We could do that. We could to-day, after a number of years, be able to indicate in advance what our net cost would be in those prices, and there would be no surplus in the co-operatives. The surplus would be back in the hands of the individuals who bought their commodities at a lower price. The same result is achieved to-day by charging him 25 cents a gallon for gasoline and giving him 5 cents back. We could charge 20 cents straight and there would be no surplus in the co-operative. To say whether it would be a problem is something I could not answer.

Mr. McDONALD: To what extent is your business carried on a cash and credit basis in the retail business?

Mr. FOWLER: One of the fundamentals in the co-operative movement—perhaps observed more in the breach than in the observance—has been that the business has been done by cash. One of the rocks on which the movement foundered was giving too much credit. Perhaps like some other bad habits it is impossible to break it off overnight; but speaking for Saskatchewan we are definitely moving towards a 100 per cent cash basis. Improved co-operatives are dealing that way. We are trying to say to our members, coincidental with the encouragement to the credit union movement to divorce credit from merchandise: If you are in need of credit and if you are entitled to credit then your credit union can take care of your needs. That technique is being worked out to a greater extent.

Mr. McDONALD: In other words, he borrows money from the credit union instead of the bank and pays cash at the cooperative store?

Mr. FOWLER: That is right.

Mr. McDONALD: I was struck yesterday with your statement and by that of Dr. Coady this morning. Dr. Coady said that there were 386 credit unions in Nova Scotia, or in the maritimes, and that the number of people who have done business with them, presumably on credit, not one dollar of loss was sustained. I think that is a marvellous record, and I am speaking now as a humble country merchant. I should like to know how such a careful selection of customers of that kind can be made.

Mr. FOWLER: I only know, in my own experience as manager of a cooperative and later as manager of the refinery, and as an individual who has, like you, engaged in private business, that I would hate to tell you how much was never collected when I was in private business. But yet those same individuals in that same community, to whom I had in my capacity as a partner in business granted credit, and who still never have paid me, would break their backs, metaphorically speaking, to pay their bills to the cooperative.

Mr. MACNICOL: Why do they not pay their private debts first?

Mr. FOWLER: I cannot answer that. Dr. Coady said he could not answer either.

Mr. MACNICOL: I should like to ask Mr. Fowler a question. I have not any recollection of just what you said, Mr. Fowler, when you first came in, as to your position in Saskatchewan in connection with the cooperatives. Would you tell me that first?

Mr. FOWLER: Yes. My main position is secretary and manager of this cooperative refinery to which I have referred. I am also president of Canadian Cooperative Implements Limited, which is our farm machinery cooperative and which, as was brought out in the evidence yesterday, is now in process of development. In addition to that, I perhaps have my finger in too many other cooperative pies.

Mr. MACNICOL: I am not clear either as to the situation in Saskatchewan. Is the whole movement under one direction?

Mr. FOWLER: No, sir.

Mr. MACNICOL: Is each individual cooperative group operating under its own direction?

Mr. FOWLER: Yes. They are what we call autonomous associations with a local board of directors and a local board of management. They, in turn, own the central organization like the refinery, the cooperative wholesale and the cooperative mill.

Mr. MACNICOL: In other words, they are all under some central direction?

Mr. FOWLER: No. It is the other way. We are what we term a federated body. In other words, we will take, for example, a cooperative out in some town. We do not direct it. On the contrary, the members of the cooperative come in to our annual meeting and direct us.

Mr. MACNICOL: In that, it is no different from any other organization?

Mr. FOWLER: No.

Mr. MARTIN: They have a separate charter.

Mr. MACNICOL: They report to headquarters and they direct headquarters. Any other business is organized in the same way. Take the oil company in the city of the member for Lambton, Imperial Oil. When the shareholders all over Canada go to Sarnia, or wherever the annual meeting is held, if they are sufficiently strong they can control the whole program.

Mr. GRAY: That is the theory, yes.

Mr. MACNICOL: I want to ask a question, too, about Regina, Mr. Fowler. You are manager of the refinery just outside of Regina?

Mr. FOWLER: Yes.

Mr. MACNICOL: I have been there. Last summer while passing by, the gentleman who was with me, drove up to the gasoline station and purchased ten gallons of gasoline. I did not ask him, but he told me this was a cooperative gasoline station. I did not ask him whether he was a member of the cooperative society or not.

Mr. McNIVEN: How did he do that? With coupons?

Mr. MACNICOL: He purchased a tank full, anyway. We were going quite a long distance. I can purchase ten gallons in Toronto.

The CHAIRMAN: Order, please.

Mr. WOOD: That was before the cut in the coupons.

Mr. MACNICOL: All I have to do to purchase ten gallons in Toronto is to advance four coupons. I did that a few days ago. I intended to ask that gentleman whether he had anything to do with the cooperative or not. That bears out what you say, that anybody can drive up to your gasoline station and purchase gasoline. That is on the main road, and I presume that it does a fairly thriving business; that is, in ordinary times. A few moments ago you said, or I understood you to say, that perhaps about 20 per cent of your receipts came from such gentlemen. Is that right?

Mr. FOWLER: No.

Dr. COADY: No.

Mr. MARTIN: It could not exceed that.

Mr. MACNICOL: How are you going to tell?

Mr. FOWLER: I think if you had followed that transaction through, you would have found these circumstances. At that station each man has a number. Mine is 399. Every time a man buys gasoline he is asked for his number and that is recorded. If he says that he is not a member, that he is a non-member, then they are a little remiss in co-operative enthusiasm if they do not try to make him a member. If he is not a member, they mark it down as a cash sale. These are recorded and very carefully watched, because we want to live up to the law, and as far as is humanly possible we do our best to see that the patronage outside our members is kept at a minimum.

Mr. MACNICOL: Then suppose there were 100 people who passed your station in a day, none of whom were members of the cooperative of Saskatchewan. Would these non-members be turned down? They are entitled to gasoline. Their tanks might be nearly empty. By what right would you turn them down?

Mr. FOWLER: Not in that cooperative; because in actual practice the transient business, as we call it, has never reached over 2 or 3 per cent. But in some cooperatives them say, if you are not a member—they may be breaking some law; we do not know—"We cannot sell it."

Mr. MACNICOL: But your particular gasoline station is on a highway?

Mr. FOWLER: Yes.

Mr. MACNICOL: Over which there is a good deal of traffic?

Mr. FOWLER: Yes.

Mr. MACNICOL: And it would strike me that a great number of people would likely buy there daily or weekly. How are you going to keep track of the number of people who buy there daily who are not members of the cooperative society?

Mr. FOWLER: I might say just generally that one of the problems of cooperative administration is cooperative accounting, and that is one of the things which is perhaps more costly in our method of operation. But we do keep track of every sale. The man's name is asked; and as I said before, if it is a man who is not known, they mark it as a cash sale, and they watch this very carefully.

Mr. MACNICOL: I think my friend Mr. McNiven who lives in Regina—

Mr. NICHOLSON: He would not buy there.

Mr. MACNICOL: I was going to ask if he has bought there. Mr. McNiven and many other Regina people—and Regina is a city of perhaps 60,000 or 70,000 population; I would rather make it larger than smaller; it is a very fine city—must drive out that way frequently, because the roadway leads out to the very beautiful Qu'Appelle valley. I was delighted with it myself, and I want to go back and see it again this summer. Mr. McNiven and other Regina people driving out that way, seeing that beautiful station of yours, would be inclined to buy gasoline there. Have you any way of telling the number of people living in Regina who buy gasoline regularly there? Is it just outside of the city.

Mr. FOWLER: All I can say is that we definitely endeavour—perhaps the human element comes in and some of the boys do not ask when they are supposed to. But we know at the end of the year that we are able to furnish a certificate—and it is very important—to the inspector of income tax that not over 16½ per cent of our total business was done with non-members; and that is the limit that has been set by the Income Tax Act. That is very carefully watched.

Mr. MACNICOL: Do you sell gasoline at the standard price in Regina?

Mr. FOWLER: Yes, these are the same prices as at any other station.

Mr. MACNICOL: Would you be allowed to sell for less or is the price set?

Mr. FOWLER: I think under the Wartime Prices and Trade Board regulations we are allowed to bring them down; if we want to start a price war probably we could do it without any reprimand from them.

Mr. GRAY: It is a set price.

Mr. MACNICOL: Is there any objection to your cooperative society starting gasoline stations in every village and town in Saskatchewan if you want to do it?

Mr. FOWLER: Not under the present regulations; but, of course, our technique is not to start stations. That is the costly thing to do in the distribution of any product. We go to the community where we have an inquiry and tell them the story of cooperation and say, "If you want a station you must put up the money for it, you must manage it, you must take care of it, you must run your own business." By that technique it is possible in theory to have a cooperative station put in every community if the people in the community are prepared to put up the capital and accept the responsibility of management. We do not have a cooperative central organization go out and start stations or open stations; it is done by the people.

Mr. MACNICOL: In other words, there is nothing to prevent cooperative societies anywhere throughout Canada from expanding the scope of their activities?

Mr. FOWLER: That is true.

Mr. CASTLEDEN: You have to get permission from the Oil Controller.

Mr. MACNICOL: I mean stores or anything else. So that there really is not any conflict between cooperative societies and ordinary private businesses, as we call them here. I do not see any conflict, but I gathered there was one, from the remarks made by yourself, Dr. Coady and Mr. Wood. I was wondering if there was any conflict; I have not heard of any conflict. I think you can start anywhere you like, and in that way I see no restriction on your freedom to do what you like, to start as many cooperatives as you like.

Now, I want to make one or two observations. Mr. Good in commencing his remarks said, "If we wait until the armistice it will be too late."

Mr. GOOD: I was quoting, but with approval, from Dr. Drucker.

Mr. MACNICOL: I agree heartily with your statement that if this committee, which, as Mr. Fowler said, has all the eyes of Canada centred on it, waits until the armistice to make provision to provide jobs after this war, then we will

have failed in our duty. As the chairman of the committee has heard me say before, our primary business is to provide jobs, to provide means to give large numbers of jobs immediately this war is over. I have listened to the remarks of the three gentlemen, but I cannot help saying to myself the purpose of this committee is to provide jobs. While all the things that they have said might be considered after the war, the primary duty of this committee at the present time is to commence at the earliest possible moment—this war may end more quickly than we expect, I hope it will—to provide a large number of jobs to which we can send thousands and thousands of men. Now, while cooperation may work out by and by, at the moment we have to commence to prepare detailed plans for this job and that job where we can send 1,000, 100 or 500 men and women. If this war ends before that is done we shall be in the same position as we were at the end of the last war. I was through it, I know. I had a conversation with a very big manufacturer Saturday last, a government manufacturer, that is, operating a government plant, so he is not a private individual, and he told me that they had over 4,500 men and women on their pay-roll. He said, "Mr. MacNicol, unless plans are made to provide jobs for these 4,500 men and women that we have here one day after the war ends they will all be on the street." That is our problem. That is the problem we have to face. I like to listen to any presentation that is made, and these gentlemen made a good presentation, but I am here as a member of this committee to consider how this committee can recommend to the government the providing of 100,000 jobs at the earliest possible time through a thousand different avenues. That is our main purpose. Every newspaper you pick up asks what this committee is doing to provide jobs immediately the war is over. That is our purpose. I do not want to say one word of criticism of the three gentlemen who have been before us, but as a member of this committee our job is to provide jobs in a big way.

Mrs. NIELSEN: Mr. Chairman, I should like to ask Dr. Coady this question. I was greatly interested in the fishing cooperatives along the coast. I was born by the sea so I like lobster too. You see, that fishing industry depends upon markets. You spoke about Boston as the market. Suppose after this war we go into a period of depression again, which, I believe you will agree, is the natural phenomenon of monopolistic capitalism. Suppose we go into an era of that type, to what degree will the cooperatives be able to function in the interest of the people if there are no markets for the products which the people are producing? What would happen to your fishing cooperatives if there are no markets for lobster in Boston and other places?

Dr. COADY: The evident thing, they would not be able to do anything; they cannot create the markets except for their own members. There are two things in the situation, the marketing cooperatives marketing lobster will give the fishermen a greater share of the consumer's dollar under the present system; that is, the selling on the open markets of the world. We sell in Boston, largely, and Gloucester. I pointed out the difference in price returns to the fishermen; if we were selling on an organized market in Boston, a cooperative market in Boston, we would get still more and the consumer in Boston would get his fish for less. In years gone by, before the embargo, we sold most of our canned lobster to the British C.W.S., the cooperative wholesale; that is, organized producers selling to organized consumers. If you had the whole world that way you would have a better world than you have now.

Mr. McNIVEN: If you had the whole world that way would you not have one giant monopoly?

Dr. COADY: There is nothing wrong with a monopoly if it is owned by the people; it is a question of who owns the monopoly.

Mr. McNIVEN: Providing the people are right.

Mr. MARTIN: I think the members of the committee will at once concur in the statement made by Mr. MacNicol in so far as it goes. Undoubtedly one of our functions here is to suggest ways and means of taking up the slack in employment that may come upon us any day. You will all agree with that. That is a very important task, but what Father Coady and these other gentlemen have said is in terms of taking the longer view to provide conditions by which employment can be made more stable. With that in view I should like to ask Father Coady to tell us something about existing provincial legislation that encourages the extension of the cooperative movement and what suggestions he has to make for federal legislation along that line. I have in mind particularly a cooperative that has been formed in south western Ontario by the corn growers, based upon your scheme in Nova Scotia, and actually encouraged by it because of the visits of the director of the corn cooperative and others to the college. What further legislative encouragement can come; (a) from the provinces, (b) from the federal authority?

Dr. COADY: That is a pretty hard question to deal with. I stated in my talk to you that two of the things that could be done by the government would be to foster education and organization of the people; that is, adult education. If we cannot get any other results in our democracy we have to mobilize the people, get them enlightened, that is the common sense thing to do. If we are going to lead this country toward a better democracy the people of the country must be enlightened, they must be educated; that, in turn, is a function of the government. The next thing, equip people for group action.

Mr. MARTIN: Take that adult education movement of which Dr. Corbett is the director—

Dr. COADY: That is not promoted by the government, that is a clearing house for all of the other adult educational societies or associations in Canada. The government should equip the people, educate them and then equip them with the necessary public utilities; for example, a cold storage in the case of the fishermen. I stated in my narrative that it is very important that they should be given every opportunity, and that the governments should see that no legislation is put across that cripples the people. After all, the common people in modern democracy—in all time—throughout the entire human history the condition of the underlings of society has been difficult and they have a tough job in bucking a competitive world; and all governments, especially here in Canada, have taken that into consideration; they try to help the primary producers and the down-and-outers. So, one thing is certain that the governments can do, and that is to see that there is no legislation that will make it difficult for the people to make progress, either educationally or economically; and if you do that, you will have done a great thing. Those are things to which attention must be given if we are to be truly democratic; and I want to add, that the governments should spend money to enable them to do things on their own; in other words, set them up and let them go; don't own the institutions thus created—there has been a tendency in the last few decades that if the government spent money is must control and operate what is created thereby. If it is wise to help the people in this country, educate them and organize them and then let them go. Then they are a free people.

Mr. McNIVEN: You mean, help them to help themselves.

The WITNESS: Yes, help them to help themselves; supply the money and let them go.

Mr. MacNICOL: Dr. Coady, do you fear the government interfering with the progress of the cooperative movements?

Dr. COADY: I fear very much groups forcing governments to do certain things or not to do certain other things.

Mr. MacNICOL: I do not think they would.

Dr. COADY: I hope they will not.

Mr. BERTRAND: These cooperatives would be made up from the common people and they would be in the vast majority and it might easily be that they would be the ones to make the competition for the privileged few. I think you are doing a very good work in your organization, and if I had the means of settling the problem of what is to happen after the war I do not think the cooperatives would suffer very much in the long run. They can do a lot in the way of educating people and probably in the way of getting government help to bring this about. However, that is not the medium for the immediate settlement of the difficulties we are faced with, and which we will be confronted with immediately after the war; do you think so?

Dr. COADY: I think there are a good many things that could be done immediately. For example, equipping the fishermen of eastern Canada, that could be done immediately. They are already organized and ready to go if they got the chance. The same thing would apply to the farmers. I would say that one of the great possibilities in Canada for the development of both population and wealth is to be found in the rural end of it. We are still a pioneer country.

Mr. BERTRAND: That is all very well if you say you are going to get your produce from the sea, and the fish are in demand; but we have stimulated the production of bacon from 2,000,000 pounds to 8,000,000 pounds to serve a market not formerly ours. One of the big problems with which we are going to be faced after the war is in finding markets, not only to take care of production in that volume, but even sufficient to keep our people living. Even if that were in the hands of the cooperatives, the cooperatives could not do anything about it.

Dr. COADY: The cooperatives can always get more for their people out of whatever processes are available than the other way.

Mr. BERTRAND: Of course, I can understand your problem; but, with respect to the need of stimulating production or anything of that kind beyond what you already have—I listened very carefully to your presentation, and from what you have said I do not see any practical way in which the cooperatives are going to help us to solve these problems.

Dr. COADY: Perhaps that does not go the whole way in the solution of the problems to which you refer; but, what is your alternative? As I see it, there is only one real solution to the problem, and that is finding ways and means of getting more markets throughout the world.

Mr. BERTRAND: That is true; but what I had in mind was this; your cooperatives are asking for more help and you are trying to go ahead. The people in your cooperatives comprise the vast majority of the population and they would only be opposed by the few who might impose on the government—and may I say that I do not think any government would agree to the suggestion that they would be influenced in that way—it could not be, it is not logical; you have a majority of the population interested in building up your organization, and the privileged few would not be able to run them. There need be no fear about that.

Mr. CASTLEDEN: They have done pretty well in the past.

Mr. FOWLER: There is reference there to something which was mentioned in my brief; mainly, our farm machinery program. I think you will all admit that is a problem, and it is a problem that has beaten both private industry and governments—getting this farm machinery into the hands of the farmer at a price he can afford to pay from the returns of his crop. I mentioned in my brief that we had approached the government of the day in regard to the utilization of war factories. On this present trip I expect to interview the administrator of farm machinery and see how soon we can get priorities

to start this functioning so we can see how soon we can get materials and men by which to turn these guns and tanks and things into ploughshares. If you remember, and if you will take the trouble to reread the evidence that came before a committee of this house in 1936 and 1937, you will see the impasse that was reached—you might like to look it up. However, there is one way in which we can employ, I do not know how many, but we can employ a large number of men making these ploughshares instead of swords.

Mr. MARTIN: You said something in your statement which I suggest you may want to clarify; that trade unions would not do it. I do not think that your other statement would be satisfactory from your point of view if you do not clear that up; that the trade union movement still has a place in cooperative society.

Dr. COADY: Why, of course, the trade union movement, collective bargaining, has given the workers a great hoist. In the case of the Cape Breton miner that has multiplied his earning capacity from 90 cents a day when I was a boy to \$3.91 today.

Mr. MARTIN: I thought you should deal with that.

Dr. COADY: I say that is one incident that can help people to get their proper share of the wealth.

The CHAIRMAN: Ladies and gentlemen, Mr. Noseworthy has a question he would like to ask. He is not a member of the committee and, of course, he would require permission of the committee to ask his question. Are you agreed that he should ask a question?

Some Hon. MEMBERS: Agreed.

Mr. NOSEWORTHY: The question that I had in mind to ask, Mr. Chairman, has already been asked by Mr. Martin. And, I was going to ask the delegates to indicate to this committee what special recommendations this committee could make to the government that would facilitate the cooperative movement and enable the cooperative movement to take its place in the structure. I do not think that was done very clearly. It may be that members of this committee would like to know just what recommendations they could make that will enable the cooperative movement to take a greater part in the reconstruction immediately, in the present.

Mr. GOOD: That is a question that I really wanted to answer before the session closed, because it has been raised to some extent by Mr. Martin and Mr. Bertrand. Here is a situation that has come suddenly in this country owing to the war. Vast numbers of people have been drafted in the military forces, the armed services, and into the war factories. No cooperator with any sense of reality at all would suggest that there can be cooperative development in Canada sufficiently great and sufficiently quickly established to take care of the situation at the end of the war. That situation must obviously be taken care of by the state. Plans ought to be made now for various emergency works for which these people and these factories can be utilized, but to the extent that cooperative development can be encouraged now and after the war there is then a room for these people, a use for the factories. Mr. Fowler has indicated one particular use to which these war factories and the people therein may be put after the war. There are dozens of other things that will serve the interest of the common man, but the cooperative movement has never developed over night to a great extent. It has been somewhat slow. You are quite right in saying we have given you more or less a long distance view. I think that would answer Mr. Martin's question and Mr. MacNicol's question. They are perfectly right. This committee probably has a very serious duty in laying the foundation for certain emergency measures immediately after the war that will carry on and bridge the gap

between what we hope will be a permanent peace economy and the war economy of the present.

In reply to Mr. Noseworthy's question, it is a fair question, and I have been thinking about it since I made the remark yesterday that we are not asking for any special privileges, which I repeat and emphasize. We do not want any money subventions, but there is an area wherein the state, either provincial or federal, can legitimately give encouragement and can legitimately use money, and that is in the field of education. Now then, is it fair to think, is it right to think that this parliament is interested in encouraging the development of democracy? We are fighting for our lives in this vast struggle for the preservation of democracy. Am I right in thinking that this parliament would be willing to appropriate a sum of money to develop good citizens and to maintain and improve our democratic machinery and practice here in Canada? Is that not a legitimate objective?

Mr. MacNICOL: We are all doing that.

Mr. Good: If so, is it not equally legitimate for the government to give encouragement to a system of economic democracy, the advantages of which we have tried to set out? We do not want it in the way of—what shall I say—government under-girding and what will develop into pap feeding. We do not want that at all. This is a movement of self-help but there can be money advanced under certain circumstances. Dr. Coady told you of a case in New Brunswick where money was advanced. I can tell you of another case. This is a case in Ontario where a big cold storage plant in the county of Norfolk was established a good many years ago at a very heavy expenditure.

Mr. MARTIN: In Simcoe?

Mr. Good: Yes. That was built by a government advance of money, and that advance is gradually being worked out. That was a legitimate thing for the state to do. The state ought to be careful about that sort of thing because sometimes they have got in pretty deep, in Saskatchewan, for example, some years ago in the dairy industry. Anyway I think that is a perfectly legitimate thing. That is perhaps one answer to Mr. Noseworthy that there are a great many cooperative developments that may be tremendously useful in the future, that is, if we can make the thing permanent.

I believe there should be an earnest and yet a sensible and sane enthusiasm on the part of this parliament to establish and maintain and develop an economic democracy. Some things will have to be done by the state. After the war a lot will have to be done by the state for a few years but that should be to bridge over and bring about economic democracy. Does that answer your question?

Mr. NOSEWORTHY: I would like you to go one step further and indicate the particular type of education that you think the government should assist in in order to develop—I do not like general terms—education.

Dr. COADY: The type of education that we are carrying on is that we mobilize the working people to do the things that lie round about them in the economic field. That is the first phase of it, and we move on from there to the cultural. The government is already doing that.

Mr. MacNICOL: You are not asking any government help?

Dr. COADY: The government is helping in the organization and education of the fishermen of eastern Canada.

Mr. McDONALD (Pontiac): The local government?

Dr. COADY: No, the federal.

Mr. MARTIN: Under Colonel Barry?

Dr. COADY: Yes.

Mr. NOSEWORTHY: Do I understand that you suggest that the government might well be asked to provide money to assist in educating the public along cooperative lines, and how to build cooperatives and how to carry them on, education in cooperatives?

Dr COADY: That is probably too specific. To me education of the masses will inevitably lead to cooperative. If you feed a hen a proper balanced diet and keep her in the proper environment she has got to lay eggs. She cannot help it. If you give people enlightenment they are going to turn to cooperation and there is nothing you can do about it.

Mr. MACNICOL: It is one o'clock and I move a vote of appreciation to Mr. Good, Mr. Fowler and Dr. Coady for coming before the committee and presenting their briefs. We will read them over carefully and later we may have an opportunity of further discussing each brief.

Mr. CASTLEDEN: I would like to second that motion. I think our committee in its past meetings has had ample proof of the failure of the economic and social life of our country. I think this is the first time we have had any evidence presenting a solution to that which strikes basically at the cause of the economic and social failures of Canada in providing the people with the good things of life. Yesterday and to-day we have been privileged in listening to more than a mere theoretical talk about some future Utopia. I think we have been given a picture of something living and real, something that is based on real ideals and Christian principles. I think we have had the privilege of listening to the story of a great cause presented by great men and I have great pleasure in seconding that motion.

Mr. MACKENZIE (Neepawa): Can we discuss that motion?

The CHAIRMAN: You may.

Mr. MACKENZIE (Neepawa): I do not want to. I would like to ask one question or make one comment.

Mr. CASTLEDEN: I was just going to say...

The CHAIRMAN: When I rose I thought you were through.

Mr. CASTLEDEN: I would like to move that at least several hundred copies of these meetings be printed.

The CHAIRMAN: You can hardly make that part of your motion. We can deal with that again.

Mr. MACKENZIE (Neepawa): I was very much interested and very much impressed with Dr. Coady's address this morning. I agree with him to a very great extent but I was wondering if he was trying to leave the impression that the expansion of cooperatives, bringing cooperatives into the world would make people that much better; he said himself he would be willing to pay his employees to the full extent of what they were worth. In Canada that may be true as far as Dr. Coady is concerned that may be true but the people who are running cooperatives are businessmen as well as the businessmen that are running other businesses and I was wondering if he knew that in the old country, in England, we find that employees of cooperatives have had to form their own unions in order to get justice from their employers, cooperatives formed from labour union members. That is a fact. I was wondering if he knew that.

Dr. COADY: There are two or three things there. There is one thing that comes to my mind that I did not bring out in my speech. I think it is the kernel of the whole thing. You have here 12,000,000 people in Canada; we have 1,121,000 in eastern Canada. The proposition that I put before myself is this: what are we going to do to mobilize these 1,121,000 people in eastern Canada? We are going to condition them through education and enlighten them to do all the things that men can do in Canada. What we do in eastern Canada in one zone you will do in the five other zones across Canada, a movement

to condition the people of Canada to do everything they should do. I say that cannot be done by academic education; that you cannot academically educate the common people, the worker and farmer unless they are thinking continuously on issues of social and economic action. As a practical educator, that is the whole thing; that we resort to economic cooperation as an instrument of education more than an economic instrument. When the people of Canada think and get enlightenment and try to have that issue in concrete social and economic action they are made new people, self resistant people. We will have a people who will be able to take an idea from anywhere. What is wrong with our society? We are not sure of ourselves. We are like shoddy cloth that is too rotten to hold a patch, and we have revolutions. We ought to use our strength. We can take an idea from Russia or China, or any place else, and we do not destroy our identity. Now, this fundamental education, parallel with social and economic activity, stiffens our people and makes them resistant, makes them take everything in their stride; and you have a crescendo of progress. That is the principal thing to-day.

Mr. MATTHEWS: Do you think there will be no exceptions to that rule? Would everybody follow that?

Dr. COADY: It would not need everybody; it would get all the people it could.

Mr. MATTHEWS: What would you do with those who are not interested in it and are lagging behind or waiting for the other fellow to take it up?

Dr. COADY: You have struck upon one of the greatest characteristics of the cooperative movement. God made so many common men unfit for a competitive society and they cannot live properly. To the south of us we have the United States, the most progressive country in the world, where there are whole states of such people; and here in Canada we have such people struggling for existence with the rest of us—very smart people like ourselves, shall I say, because thousands of those people could not measure swords with us, and therefore cannot live properly. But if we get an organic society such as I have outlined we extend the hand of help to those fellows who cannot get along; we make them good citizens; we show them the way where by imitation rather than by aggressive action they can cash in, and we help our brothers; and that is the greatest characteristic of this whole movement; we are tempering the wind to the shorn lamb.

Mr. MATTHEWS: Suppose they do not accept that?

Dr. COADY: All right; what can we do? Nothing. If we cannot do it this way it cannot be done any other way.

Mr. MATTHEWS: I have given this subject a great deal of thought and have read a lot about your union; and I remember that four or five years ago I spent a very pleasant hour in your university discussing this matter with either yourself or Dr. McDonald, and ever since then I have been greatly interested in this subject; but there were a few things that came to my mind that I was not clear on at the time. I think you are doing a great work.

Mr. HILL: There is one point that I think Dr. Coady has made very clear, and Mr. McDonald has assisted him in doing it: this cooperative movement creates a morale among the people. The men who will cheat Mr. McDonald will not cheat the cooperatives because they feel that if they are out of the cooperatives, they are out on their ear, and they are making more out of it. I think that is one of the strongest points in which the cooperative helps.

Mr. ADAMSON: Have the cooperatives interested themselves in housing projects, and if so, have they been a success?

Dr. COADY: We are at our seventh project now among industrial workers. We have six projects already finished in Cape Breton among the coal miners.

The first one was eleven houses on a 28-acre piece of ground. They are moderate houses as far as expense is concerned with most of the work done by the people themselves. Seventy-five per cent of the money was given by the government housing board, and they built these nice houses and put three-quarters of an acre of ground with each house—a well planned community on twenty acres of ground. We are on our seventh project. That proves something for democracy. Here is a group of people who have been living in company houses and we have built houses that are worth about \$2,500 for \$1,850 for which they pay \$12.50 a month which takes care of amortization, depreciation, interest and repairs. We have a group in Sydney who pay \$18.50 per month for a whole house, for a man and his family. You could not rent a garret in Sydney to-day for \$18.50 a month. We struck it at a good time, of course. That brings out something in human nature; here we have a proletarian group that have had the steadfastness and courage and persistence to start and follow through and do the thing right.

Mr. McNIVEN: What is the rate of interest?

Dr. COADY: The government rate—3 per cent on government loans. The rest of the money is raised through credit unions, and in any other way they can.

The CHAIRMAN: Ladies and gentlemen, you have shown the utmost interest in the proceedings of yesterday and of to-day. The motion is one of appreciation to Dr. Coady, Mr. Fowler and Mr. Good. Our discussion on that motion broadened out into further questioning and such enthusiasm and interest is the greatest tribute that could be paid to the three witnesses who have been with us. However, the clock keeps ticking on and our usual time has expired. I am not putting a formal motion because you have shown decidedly, whether you are in agreement or not with the opinions of these gentlemen, that you are deeply appreciative of the evidence that has been given to us, and of the excellent manner in which their viewpoints have been expressed to us. Therefore, as chairman of the committee, I tender to you gentlemen on behalf of the committee, and of all those who have been listening, our expression of appreciation.

The committee adjourned to the call of the chair.

W. Doc.  
an.  
Com  
R

Special Committee on Reconstruction and Re-establishment  
Spec. Cttee on 1943/44

SESSION 1943  
HOUSE OF COMMONS

SPECIAL COMMITTEE

ON

RECONSTRUCTION AND RE-ESTABLISHMENT

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 13

WEDNESDAY, MAY 19, 1943

WITNESS:

Mr. J. M. Forbes, Consulting Engineer, Montreal, P.Q.

OTTAWA  
EDMOND CLOUTIER  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1943





## MINUTES OF PROCEEDINGS

WEDNESDAY, May 19, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11.00 o'clock, a.m. Mr. J. G. Turgeon, the chairman, presided.

The following members were present: Messrs. Bence, Bertrand (*Prescott*), Black (*Cumberland*), Castleden, Dupuis, Eudes, Ferron, Gillis, Hill, Jean, MacKenzie (*Neepawa*), Mackenzie (*Vancouver Centre*), MacNicol, McDonald (*Pontiac*), McKinnon (*Kenora-Rainy River*), McNiven, Martin, Matthews, Nielsen (Mrs.), Ross (*Calgary East*), Sanderson, Turgeon, and Tustin—23.

The chairman stated that a joint meeting of this committee and the Social Security Committee will be held on Tuesday, May 25, to hear Sir William Beveridge.

Mr. J. M. Forbes, consulting engineer, was called. He presented a brief on the employment possibilities from industrial and mineral expansion, was examined by the committee, and retired.

On motion of Mr. McNiven a vote of thanks was tendered to the witness.

The chairman announced that on Thursday, May 20, the committee would hear Mr. Louis Berube, professor, School of Fisheries, Quebec, respecting new employment possibilities in the fishing industry in Quebec; and on Friday, May 21, would have as witnesses Mr. D. W. McLachlan, Department of Transport, Ottawa, and Mr. S. W. Fairweather, Chief of Research Development, Canadian National Railways, dealing with Nova Scotia coal and the Canso Strait.

The committee adjourned at 1.00 o'clock, p.m., to meet again Thursday, May 20, 1943.

J. P. DOYLE,  
*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

May 19, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11 o'clock, a.m. The Chairman, Mr. J. G. Turgeon, presided.

The CHAIRMAN: Gentlemen, before introducing to-day's witness may I tell you what you already know, that Sir William Beveridge is going to be with us on Tuesday. There will be a joint meeting of this Committee on Reconstruction and Re-establishment and Dr. Macmillan's Committee on Social Security and the Senate Committee on Reconstruction and Rehabilitation. We are meeting in the railway committee room on Tuesday morning at 11 o'clock.

Mr. BLACK: Is Sir William Beveridge's report in printed form available to us?

The CHAIRMAN: Not that I know of.

Hon. Mr. MACKENZIE: I do not think it is, but I shall be very glad to let Mr. Black have my own copy and I shall send it up in a few minutes.

The CHAIRMAN: Our witness to-day is Mr. J. M. Forbes, consulting engineer, of Montreal, who is going to speak to us on employment possibilities that would result from an industrial and mineral expansion of Quebec. I have been talking to him and he is interested in the whole northern and central portion of Canada straight across from Labrador to the Pacific ocean. I found out in the last few minutes that he has an advance party now up in my Cariboo country. I have not asked him just what he is looking for, but he is up there looking for something, so we are particularly glad to have Mr. Forbes with us to-day.

Mr. MARTIN: Do you think he will find anything up there?

The CHAIRMAN: I do not know; he may find me up there this summer. Mr. Forbes, will you come forward, please?

Mr. JOHN M. FORBES, consulting mining engineer, Montreal, called.

The WITNESS: Mr. Chairman and gentlemen, I appreciate very much the honour of addressing you and your committee. The subject-matter of the brief which I am about to present covers in the main all prospecting on a national prospecting effort extending from Labrador right across Canada and northward to the Arctic circle. I am going to suggest to you, among other things, that we create or recreate a prospecting personnel properly trained, properly supervised, which will explore the enormous extent of our country, which is about 4,500 miles in all in length, and in places 200 or 300 miles wide, which is a potential source of new mining in Canada. To do that is not simple, for the reason that the prospector as I have known him for twenty-five years in his way is the salt of the earth and has made nearly all our discoveries to date, and from his efforts, which were on a minor scale, hundreds of millions of dollars have accrued to Canada. I am therefore talking as a start of an endeavour to create general employment, and by that I mean the farmers, the artisans and the miners, with the blacksmiths and everything thrown in.

The key to the opening up of Canada is still the prospector, and I am going to advance to you a scheme which is the result of twenty-five years' experience, which, among other things, provides that the prospector be the owner of what he finds. I shall enlarge on that a little later. I am going to suggest also that

the prospector be educated during the winter months when he cannot function in the bush and that the provincial government and the federal government take an interest in the prospector and help him. This may sound somewhat radical—I do not think it is—but the prospectors never have any money. They have lived on beans and tea in a little shack in the winter and they probably had \$25 to carry them through. They operated on little money, took their canoe and disappeared in the spring. I want to bring those men back to their self-respect. They are one of our most valuable assets and I think we should pay them out of public funds and when they come back in the fall of the year give them a little money to tide them over the winter and educate them. To do that involves transportation. That is the most serious item. It can only be done by air, and therefore I am going to suggest that bases be established from Labrador to the Arctic, right across Canada, and that bodies of prospectors properly trained and self-respecting shall comb this country. I suggest also that in the event of the prospector finding a mine which is of great benefit to the country—and one or two mines will pay very easily for the expenses of this proposal, operating over a period of ten years. We know our Canada in a way, yes, but there is a tremendous lot of Canada that we are absolutely ignorant of, and it is to send these men out and learn our country that I advocate. They cannot fail, to my mind, to produce probably dozens of mines, which is an absolute essential for the future prosperity of Canada.

I do not know if you gentlemen realize that our present mines are dying, and due to the war their rate of decay has been greatly accelerated. Mining is now approaching a crisis.

With these few remarks, sir, with your permission I shall read the short brief which I have prepared. The brief can be followed more easily with the map in front of you, and I shall just run over it from the larger map.

The CHAIRMAN: May I interrupt just for a moment? In order to save the nervous system of the shorthand reporters, I think we should do in this case what we did when Mr. Spence of the P.F.R.A. was here, and not have the reporters try to take down the names and the places that the witness points to with his ruler on the map. His brief will cover it very well.

The WITNESS: The brief does cover it.

The CHAIRMAN: I think you should use your map and ruler, but the reporters need not bother with the names.

The WITNESS: For many years as a consulting engineer my work has taken me over a great deal of the continent of Europe, through Africa from Cairo to the Cape, and particularly in Africa through Algeria, Central Africa, including Uganda, Kenya and Tanganyika, and through the great gold mines of South Africa. I have also been in Mexico, the United States, and have traversed a great deal of Canada and Newfoundland. Canada, naturally, I know more particularly. I have explored 8,000 square miles of Newfoundland and part of Labrador. I am familiar with the major gold mines as far west as the Rocky mountain ranges, and have travelled the waterways northward from Edmonton to Great Bear lake on the Arctic circle. I have always been very interested in people, laws and the economic conditions of the countries I have travelled. I have seen native miners in Africa happy and contented with a payroll of sixteen shillings a month, and I have also seen discontented miners in North America, living under excellent conditions, disgruntled though receiving \$8 per day, and have come to the conclusion that the true solidity of any country depends on the impartial administration of justice, using it in a national sense, individual freedom and the consequent peace of mind of its inhabitants. Peace of mind is not an easy thing to attain to-day, but the creation of it should be a guiding aim in the handling of post-war problems.

Regarding the post-war problems in general, I have personally always found it extremely difficult to approximate a definite answer to an indefinite problem and our method of approach will perforce have to be to solve each problem by itself. The various increments of the indefinite problems clear themselves from the shadow and in time become more or less definite. That is, I believe, one of the objects of the Committee on Reconstruction and Re-establishment.

I propose, with your permission, to deal solely with the mining industry in Canada and to mention at this point that with the expansion of farming, the building up of export trade for the manufacturer, and the development of mining, Canada has little to fear for its ultimate future. The three developments must be accompanied in due course by a large increase in population.

Before making a specific recommendation, which occurs later in this memorandum, I would like you to consider the history of the effect of the discovery of one mine. I shall describe to you how a mining camp comes into being, and to illustrate the point I shall take the Sisco mine in Quebec.

I saw this prospect first in 1915 and was rather attracted by it. I next saw it in 1928. Stanley Sisco, his partners and associates had struggled for years and had finally managed to get enough money to sink a shaft and do some developing. It was in this position at the time of my examination. It is situated on an island about 55 miles south of Amos and could then be reached in summer by a good waterway and in winter by a very poor bush road. I recommended to my associates that they put up the necessary capital. This was done. A mill was erected and gold produced on a commercial scale for the first time in the history of the province of Quebec. That, gentlemen, was only in 1929. From that humble beginning a community of mines eventually sprang up, Sullivan, Sigma, Lacmac, Perron, etc. I want to draw particular attention to the effect on the surrounding country. A farmer, up to that time starving in a black spruce forest, began to make a decent living, roads were built, a railway came in, churches and schools following, recreation halls and even curling rinks appeared, towns sprang up and you have thousands of prosperous, contented and happy citizens in a little area of approximately 25 square miles. The silence in the black spruce forest had given way to the hum of industry and the laughter of children. To put this particular Sisco mine in full operation the sum of \$1,000,000 was provided, and it took five years of hard and sometimes anxious work to complete the picture. Collective courage was not lacking.

Passing from the specific example quoted, which I advance as a typical history of the growth of a mining community, I pass now to the general mining situation in Canada. I am avoiding detail and there are many omissions, but my object is to try and portray for you the general mining appeal of Canada as I see it.

I shall commence at the headwaters of the Hamilton river. I had a party of twelve men there for five years when I was exploring in Newfoundland; it is a wonderful country.

*By Mr. MacNicol:*

Q. Were you engaged by the Newfoundland government?—A. We were engaged by the Reid Newfoundland Company. I was a director of that company for about five years.

The immediately following remarks can more easily be read in conjunction with a map of the Dominion of Canada, published by the Department of Mines and Resources, Ottawa, covering south of latitude 75 degrees and on a scale of 100 miles to one inch. Commencing in the vicinity of the head of the Hamilton river in Labrador and proceeding in a general southwest direction you will arrive at lake St. John. Chibougamau will be to the northwest and the Gaspé peninsula across the St. Lawrence river to the southeast. From lake St. John and swinging to the north we arrive at Amos which is on the Hurricanaw river.

Q. Did you go right across Canada from Amos to Labrador?—A. I am taking an arbitrary route which will unfold as we go along. It is along the Transcontinental from Amos to Kenora. At Amos there is a gold belt to the south and also to the north. The gold belt to the south includes the Sisco area, the Noranda area, Larder lake, Porcupine and as far south as Michipicoten.

Q. Michipicoten is in Ontario on lake Superior.—A. Yes; and even at this point gold has been found on the Missinaibi. The belt is quite wide, several hundred miles at least.

To the south under a somewhat different geological set-up are the nickel mines of Sudbury and to the northwest of Sudbury the iron mines of the Michipicoten area. The latitude of these occurrences corresponds to the Gaspé peninsula and southern Newfoundland. Still holding to the Canadian National and proceeding westward we pass the Longlac gold area a little to the south of the railway, and the railway at this point goes by the northern end of lake Nipigon. We are about half way across lake Superior and to the north. Proceeding west we come to Kenora, one of the oldest gold fields in Canada. North of Kenora and a little east is the important Red Lake area with such mines as Madison, Mackenzie, Red Lake, Cocheneur, etc. The Woman lake district is a little north of Red Lake. The gold belt here is still quite wide with some good showings around the east shore of lake Winnipeg.

From lake Winnipeg and Winnipeg, still following the Transcontinental, we shall skip to Edmonton for various reasons. I do not mean for a moment to infer that this is not an attractive area as witnessed by the base metal occurrences of the Hudson Bay Mining and Smelting Company on the Hudson Bay Railway. This is about half way between Kenora and Edmonton though somewhat north. At Edmonton we glance to the south at the Turner Valley oil fields near Calgary and proceed northward to Waterways on the Athabaska river. The Athabaska flows into lake Athabaska out of which flows the Slave river and to Great Slave lake. Out of Great Slave lake flows the mighty Mackenzie river which ends up in the Beaufort sea. Proceeding northward from Great Slave lake we come to Great Bear lake and from there to the Coppermine country at Coronation gulf. Returning to Edmonton we go west to Prince George and come under the influence of the Rocky Mountain ranges. We cast our eyes southward to Trail which is practically on the American border.

I have a map of a railway survey line which is probably the most up-to-date map there is. I understand there is a railway survey line from Prince George to the Yukon. The Alaska highway for quite a distance is considerably to the east, finally crossing the railway survey at about longitude 128 degrees, 35 minutes, practically on the British Columbia boundary. From the standpoint of mining, though we know comparatively little about the country, it would appear at the moment that west of the railway survey and around the Stikine mountains is very attractive prospecting ground, and it continues through British Columbia up to Dawson city.

This general review which is associated in a rough way with the Laurentian mountain range in the east and the Rocky mountain ranges in the west has so far not included possibilities on the south side of the Laurentians. I shall refer in the same brief way to a belt which disappears and reappears from Mattawa, to Ottawa, to Quebec to below the Saguenay and includes the Thetford area, the Gaspé peninsula, New Brunswick, Nova Scotia and Cape Breton. Holding to the south side of the St. Lawrence and touching on the main developments only, we have the coal mines of Cape Breton, gold in Nova Scotia, lead, zinc in Gaspé, asbestos, chrome and copper in the Thetford area. On the immediate north side of the St. Lawrence and still on the south side of the Laurentians we have muscovite mica deposits from below the Saguenay to the area around La Malbaie with evidences of molybdenite, feldspar, etc., and north of Ottawa the Buckingham district with phlogopite mica, asbestos, graphite, feldspar and at Mattawa

a splendid deposit of muscovite mica. In passing I would draw your attention to the fact that India is the chief producer of muscovite mica—that business amounts to about \$5,000,000 a year—and in my opinion the district west of the Saguenay could replace the lack of supplies from India, and this might be more usefully looked upon as a wartime effort. I shall be glad to answer any questions concerning this particular area which I have examined several times.

I am returning now to our original starting point at Labrador, and north to the mountain ranges. We have so far indicated:—

1. Huge deposits of iron ore in central Labrador. Muscovite mica in the Manouan district, copper and gold in the Chibougamau area.

Q. Those deposits are at Sawyer lake, are they not?—A. Yes.

Q. Have you been there?—A. No, I have been pretty close to there ten years ago; we did not get far enough east.

Q. It is said to be a very large deposit?—A. It is, and it is going to be very important when taken in conjunction with the Grand Falls, of course, with at least 1,000,000 horsepower. We had it surveyed and that could be easily developed.

*By Mr. McDonald:*

Q. Is that within the territory allotted to Newfoundland by the recent judgment of the privy council?—A. Yes.

Q. It is not in Canada?—A. No, it is not in Canada; it is pretty close to the Quebec border.

Q. And the headwaters of the Hamilton river are also in Labrador, are they not?—A. Yes, they are also in Labrador. As a matter of fact, the headwaters of the Hamilton river form the boundary line, I think, according to the decision of the privy council, and that is the reason the boundary goes along the watershed.

2. From Amos and westward the following gold areas occur: Sisco, Larder lake, Kirkland lake, Porcupine. The Sudbury area considerably to the south with nickel and copper and to the Michipicoten area containing gold and large iron deposits. The Longlac area, gold, the Kenora and Red lake areas, gold. Further west and considerably north is the Flin Flon area. These are the major metal deposition areas until we arrive at Edmonton.
3. We are now in what I shall describe generally as the foothill country of the Rocky mountain ranges. At Edmonton, of course, we are quite a distance from the mountains. If we proceed north from Edmonton down the great waterway to Great Bear lake, at Waterways we find huge salt deposits which are 250 feet thick. On Great Slave lake we have gold on the Yellow Knife, zinc and lead deposits. On Great Bear lake we have radium deposits and curiously enough across Great Bear to the west, oil at Fort Norman.

As a matter of fact, they take oil from Fort Norman and use it at the radium deposits which are at Cameron bay on the east side of the lake.

Mr. MacNICOL: There are twenty-one oil wells at Fort Norman.

The WITNESS: Are there? I did not know that.

North of Great Bear there is copper in the Coppermine district. It is interesting to note that the south side of Great Bear lake is just a little north of the latitude of Dawson city which is 400 miles west of Fort Norman.

4. Returning to Edmonton and starting from Prince George, which will probably be the starting point of a railway to the Yukon when built, there is a stretch of country south to Trail and north to the Yukon

which is a fascinating country. Trail produces base metals and other products, and going north from Prince George generally in the direction of Dawson, mercury and base metals occur. All Canadians know the history of the gold in the Klondike rush. Gold can be panned in hundreds of places along this route.

The total straight line distance covered in this section of my memorandum is roughly 5,000 miles. The fact that I have jumped hundreds of miles from one point to another does not mean, nor do I intend it to mean, that these areas are not worthy of attention. How then can we grasp and turn to account this enormous expanse of country and turn its potentialities into a speedy and permanent and extremely important agent for the good of post-war Canada?

You will note that in setting up previously the Sisco mine as an example, and there are many examples of how a mine is developed, I made the statement that it was a five-year process and at least an expense of \$1,000,000. Any approach we may make must bear in mind particularly the time element. In the very nature of the endeavour it cannot be rushed. It is true that some mines come into production in two years, but from the time of discovery up to reasonable production it usually takes longer.

In search of an answer as to policy to be pursued in developing this enormous territory I have studied the approach of Russia to its problem of developing somewhat similar areas. There is a book entitled "In Search of Soviet Gold", its authors are John D. Littlepage and Demaree Bess, American engineers. Stalin was evidently impressed by the California gold rush and its effect on the subsequent development of the American west. Gold rushes as a rule are based on placer gold deposits like California and the Klondike. He summed up his view in the following which I have taken from Demaree's book. He states, "This process which really made up the history of California must be applied to our outlying regions in Russia. At the beginning we will mine gold and then gradually change over to mining and working other minerals, at the same time we will open up agriculture." In a letter to Serebrovsky, whom he had made head of the Gold Trust, he stated "Without going into technical details, the new districts of the Western United States were opened up from the beginning by gold and nothing else. On the tracks of the gold hunters came other mining industries, zinc, lead, copper and other metals, at the same time agriculture was opened up because it was necessary to feed the gold hunters. Roads and transportation developed for their benefit." That was Stalin's approach to developing Russia.

There is a great deal of similarity between Stalin's ideas, based on the California gold rush and what has happened in Canada, starting with the Klondike gold rush. The effects, of course, have been somewhat different owing to different geographical positions. From this general idea (and I want you to note this) Stalin has brought Russia to probably the second gold producing country in the world, developing at the same time copper, zinc, lead, coal and iron mines among other things (and I would like your particular attention to this, because it really covers my recommendations). It is interesting to note that Stalin had for the base for his opening up the country prospectors as his key. Groups of two or three were used, they were supplied engineering and geological advice, prospector schools and a grubstake, all at the expense of the state and under rigid supervision. When a strike was made the government paid the prospector 30,000 gold roubles, not paper money. This is the equivalent to about one hundred years normal wages for an individual in Russia. In the case of lode-mines, and ours are predominantly lode-mines, in the east anyway, cooperatives were formed, working capital was advanced under strict supervision.

Apart from what we think of the various principles involved, some of which obviously do not fit Canada, Stalin made Russia into a great gold producing

and mineral producing country. Stalin started his gold development in 1929, which curiously enough is the year when Quebec produced her first commercial gold mine.

How have we treated the prospector in Canada? My answer to this is one word, disgracefully. He has literally been run off the map and the last straw was when the authorities put his stock in Escrow. In a business where luck plays an important part, and years of hard work often bring no reward, let us consider the case of the prospector who was lucky enough to make a strike.

As our mines are essentially lode-mines, it is difficult to develop them except by forming a company. The prospector's stock which represented his share in a sale of his own property was promptly put in Escrow and subjected to a few czaristic individuals. There is no parallel to this in any other business. What then was the governmental excuse? The excuse offered was that they considered it their bounden duty to protect the public. In my opinion this is merely frothy effervescence of tortuous minds governed by ignorance of the mining industry as a whole. I suggest that these so-called safeguards be torn up.

Let us do as they do in England, disclose through the press the actual deals made by the prospector. He is not to be hampered in any way in selling his own property and he is quite capable of looking after himself. If false statements are made in presenting an issue to the public then action should be taken under the ordinary criminal law which is sufficient. This would restore to the prospector his normal rights as a citizen and the whole industry would heave a sigh of relief if the shackles were removed from the prospectors' feet. I suggest, therefore, the following to rapidly re-energize prospecting in Canada:—

1. That the present blue sky laws be repealed and replaced by the British system.
2. Schools for prospectors be opened where they are not at present available. These will be used chiefly in the winter.
3. That the provincial governments grubstake prospectors under the supervision of their mining departments—the federal government acting for the Northwest Territories and the Yukon. The prospectors to be advised, and this is important, and under supervision of the party providing the grubstake.
4. That the federal government in consultation with the provinces provide air transportation—an absolute essential—for the prospector and the necessary bases. Roads will be available in some sections and air bases already in existence can be available in other sections.
5. To begin with air bases should be made available at:—
  - (a) The Hamilton river.
  - (b) Lake St. John.
  - (c) Amos or Senneterre.
  - (d) The neighbourhood of Nakina.
  - (e) Kenora.
  - (f) The vicinity of Edmonton.
  - (g) The vicinity of Prince George.
  - (f) and (g) will probably need sub-bases farther north.

This would mean to start with nine bases and would probably call for two planes to a base. These planes to operate on pontoons in summer and to be provided with skis as a good many prospectors want to go in before the break-up and some possibly come out after the freeze-up.

6. The prospector should pay a nominal sum for air transportation, this to come out of his grubstake. And the object of that is to keep them from jumping all over the country and using up gasoline, planes and time.
7. I suggest that the grubstake be computed at the rate of \$2 per man, per day.
8. On the return of the prospecting parties to the base at the end of the season, they should be entitled to a pay-off at the rate of \$1 per day elapsed prospecting time and on the certificate of the government engineer at the base. This government engineer will, naturally, be in touch with all the parties in the field during the summer and he should have absolute discretion to the point of taking prospectors off the payroll in the event of their proving unsatisfactory to him. Considerable discretion will, of course, have to be used.
9. In the event of a certificate from the control engineer being obtained by a prospecting party that a party has made a strike which is, in his opinion, of commercial value, a bonus of \$250 per man per party should be paid at the end of the season. You see, the general idea is to make it attractive to the prospector.
10. In the event of the strike being proved as commercial and certified to as such by the government engineer, each man of the original discovery group shall be given a gift of \$2,500 and this not to effect the title of the group in any way whatever.

And now, having jumped from Kenora to Edmonton I treat with oil in the next paragraph:

Regarding the possibilities of oil in Canada. The best chance seems to be in the sedimentary rocks to the east of the Rockies. So far we have expressions only. The Turner Valley south of Edmonton. The tar sands of the Athabaska and oil at Fort Norman on Great Bear Lake. The belt is 1,400 miles long from north to south and its width is unknown. It is possibly not a continuous one. It is quite wide in Alberta where huge natural gas fields are already known and some oil produced. I mention in passing oil indications at Point Barrow, latitude  $71^{\circ} 21' N.$  and longitude  $156^{\circ} 30' W.$  Alaska. That is an Alaskan area, as a matter of fact it is not on the map which you have before you. I just mentioned that because I was only informed about it just the other day.

Many companies have started an intense search for oil. I make the prediction, something I seldom do, that in time Canada will be one of the world's important producers.

Touching briefly on the rough cost of carrying out a plan of this type, it will take at least ten bases, servicing at least 15 prospectors each. The cost of their grubstake and bonus, assuming that they average 180 days per season and including the cost of the supervising engineer should work out at about \$15,000 per base, making a total of \$150,000. I am not sure of my figures on transportation which involves about 20 planes and ten bases and I am using a tentative figure of \$850,000 to cover the net loss per season, giving a total operating cost per season of about \$1,000,000. This figure will, of course, have to be checked. There are bases already established that can, no doubt, be worked into the plan and excessive ground personnel and expense avoided.

In addition to this, in the first year we will have to buy 20 planes. A suitable plane for this type of work costs new about \$35,000 each, so that there would be a capital expenditure for planes equipped with pontoons and skis of about \$1,000,000, with bases additional. The ordinary military machine is not adaptable for the use of pontoons.

Now, since I wrote that I have been in touch with the Canadian Pacific Airlines and it is a very difficult figure to arrive at, but they were good enough to work out a figure which would change that paragraph. The Canadian Pacific Airlines would probably tender on the air service—at the moment they have no planes to spare; when the war is over they would have suitable planes—the operation of an airplane service is a necessary thing and it might be advisable to turn over to the best operated company and give them a contract to service to all these prospectors.

Mr. McKINNON: There is only one now, isn't there?

The WITNESS: There is only one operating across the country. And they quoted me from just an off-hand figure that each plane would cost \$150 per day as a standby charge, and would allow you two flying hours per machine per day. Well, of course, that is no good to you—each hour flying above the two hours covered would be at a rate of \$75 per hour, in each case they to supply the necessary planes. There is not much difference in the net loss and what you would have to pay them, you would save a million dollars in planes and you would save the building of bases, which is a very important item; and the whole service in the event of a plane being down in the far north—and the search for planes sometimes takes twenty planes. In that respect it would probably be better to have some arrangement of that type.

Mr. McKINNON: Would you mind having something to say about the Steep Rock iron ore development. Have you any comments to make about that, and other possibilities say from Atikohan north to Lake Superior?

The WITNESS: I have deliberately passed that because I am not familiar enough with it; that is, I could not give you any information on it.

Mr. MacNICOL: Anyway, it is not yet in operation.

The WITNESS: I would say this, however, it is a real job; there is no doubt that the iron is there, that it has continuity but as to costs, I could not even hazard a guess.

In advancing this scheme please do not consider it on any other basis than that of a ten year plan. In its very nature it is a slow process. Information obtained is of an accumulative nature and the chances of success increase from year to year. At a yearly cost of \$1,000,000, one good mine will bring it all back and surely in this vast domain we may expect many new discoveries.

I earnestly request that you, gentlemen, give this or a similar plan serious and further consideration. It is being advanced, naturally, in skeleton form only and it would take a comparatively short time to round it out and fill in the details.

Assuming that the prospectors discover new mines, and public and private capital is easily available for the development, the subject of taxation requires careful consideration. Owing to the very nature of the business a mining community is in itself a profitable source of revenue to the country apart from the mine itself. I commend to the taxing authorities a friendly attitude toward an all out effort in mining. They will get plenty of indirect revenue if the effort is a success—as it will certainly be. It is a well known fact that a mine is a wasting asset and in this respect the mining business as a whole has a time limitation.

May I warn you, as others more competent have already warned you, that mining in Canada is fast approaching a dangerous degree of old age and that unless immediate steps are taken to open up new mines the end of the importance of the mining industry in Canada can be seen on the horizon.

Canada is a virile nation. Resurrection of mining is a comparatively minor problem compared to the major problem so successfully solved in this war. It has the outstanding advantage of providing employment for all classes as new mines are developed, and will result in the building up of new prosperous and thriving communities. The cost will be trifling—the benefits many.

The CHAIRMAN: We have heard Mr. Forbes address us on a subject of great interest to us, naturally, and on a matter that does lend itself to development. Are there any questions? I think that Mr. Forbes would like questions which would help in the development of his scheme.

*By Mr. McKinnon:*

Q. If I understood you correctly, you suggest that the government should subsidize the prospector?—A. I do.

Q. Give him every assistance; that is the first thing. I presume you mean that through the provincial governments—in fact, you said that.—A. Yes.

Q. Except in the Yukon?—A. The provincial governments taking charge of the provinces and the federal government of the Northwest Territories and Yukon.

Q. After the prospector has discovered a mine it should then be developed by private capital?—A. Developed by private capital.

Q. What would the government's stake be in the property after it was developed?—A. None.

Q. None at all?—A. No.

*By Mr. McNiven:*

Q. Why should not the government have some stake in it after having discovered it?—A. Well, sir, that is purely a matter of opinion. My opinion is that the farthest you keep the government away from industry the better.

*By Mr. McKinnon:*

Q. Would you go this far, that they should have a return of the amount of money which they invested in discovering the property?—A. What does it amount to?

Q. It probably would not amount to an awful lot in that one thing itself, but in building up your scheme to take care of many hundreds of schemes it would be a part of a tremendous expense.—A. Well, let us look at it in the face. There are about \$10,000,000; what does that amount to?

Q. It does not amount to very much in itself.—A. But if it makes Canada, forget it. Do not tie the prospector and the miner up.

Q. No, not the prospector. What I am talking about is after the property is developed the prospector is entitled to everything he gets, as he is the man that hoos the tough row; but I am thinking about the property after it is developed and the return of the government investment to the people of Canada as a whole.

Mr. Ross (*Calgary*): They will get a return in taxes, I presume.

The WITNESS: The government will get its return, sir, in the taxes on the individual and in the taxes on the company.

Mr. Ross (*Calgary*): Yes, that is what I had in mind.

The WITNESS: My point is this, with one or two mines the government is clear. The government has not lost any money, it has just advanced some money which will all come back in taxes. Keep it clean. For heaven's sake do not introduce the government into mine operation. If they want to tax, that is their privilege.

*By Mr. Gillis:*

Q. I thought I understood you to say, Mr. Forbes, that when the prospector went out and located a mine any benefit that accrued from that discovery should accrue to the prospector himself.—A. Inasmuch as he can sell it. It is an open market and he can only sell for a price.

Q. Your answer to Mr. McKinnon would not lead me to believe that the prospector is going to get very much out of the proposition.

Mr. MacNICOL: He very seldom does.

*By Mr. Gillis:*

Q. He has not to-day. You want the government to set up a national organization in cooperation with the provincial authorities?—A. Yes.

Q. Provide aeroplanes and all the necessary capital?—A. Yes.

Q. To explore Canada?—A. Yes.

Q. Hire prospectors?—A. Yes.

Q. When the prospector makes a discovery and comes back again and reports to the government, the government then hands it over to some private concern that has not had a damn thing to do with it and they develop it and exploit it in the future.—A. That is a very important point; I am very glad you brought it up. The government has nothing to do with it. The prospector sells what he has got unfettered.

*By Mr. Bertrand:*

Q. And makes such other arrangements as he feels suitable.—A. If I have a good prospect to-day, which has the appearance of being commercial, I have no difficulty in selling it; there is a market. It is a home market; whether it be through brokers or whether it be through mines like the Hollinger or the McIntyre, and so on, that have lots of money, it does not matter. That is the prospector's option. I am trying to build the prospector up into a self-respecting person who is free to deal with his own property, and I strongly suggest that Canada just write it off. Just \$10,000,000, shucks, that goes out the window in a minute.

*By Mr. Gillis:*

Q. The thing that I cannot understand is this: if the government takes the initiative in developing Canada on that basis, in view of the fact that the minerals in the ground belong to the people of Canada, why cannot the government operate it and turn back to the people, by way of social services, whatever wealth that can be produced from their own property? You will have to admit this.—A. I admit nothing, sir.

Q. You will have to admit this, in the field of mining—and I am going to take Great Britain as an example, the crisis in the fuel field in 1917—private enterprise failed them and they took over the management. Again in 1942 Britain had to do the same thing. Any new development of minerals in the future in Great Britain will be done under a plan of government ownership and operation, and to-day they are managing their whole mining industry and they have eliminated a fuel crisis. The same thing applies to Canada to-day. Canada has declared a national emergency exists in the field of coal.—A. Quite right.

Q. I think that is a clear indication of what has happened in the development of minerals in this country after seventy-five years of experimentation in the field of private enterprise. After that time we have sufficient evidence to-day that warrants the scheme that you propose being put through and being managed and operated by the government in the interests of the Canadian people. I do not think that the resources of this country should be placed in the hands of any individual to play with, as they will be, on a basis of profit as has been the case in the past. I think the war has proved it has not been successful.

*By Mr. McDonald:*

Q. Would you compare the coal mining with gold mining?—A. It is in a different class.

The CHAIRMAN: Do you want to answer Mr. Gillis?

Mr. MacKENZIE (*Neepawa*): The coal mines of Great Britain were not taken over by the government in 1917.

Mr. GILLIS: Managed as they are to-day.

Mr. MacKENZIE (*Neepawa*): No. I was there and I know the way the strikes were settled in 1917. Lloyd George went down there and gave them more money, that is all.

Mr. GILLIS: They formed a board which took over complete management of the industry as they have done to-day. The same thing happened in July, 1942.

The WITNESS: Mr. Gillis, it is not my function to discuss who should own this property. As a matter of fact, I do not care, particularly, whether the ownership is in the hands of private individuals as in the past, or whether it is in the hands of the government. It does not make a great difference to me. I do not know anything about politics except in a general way, and I still like mining. But do not forget this, that the development of Canadian gold mines is a highly scientific procedure in which you must have the option to stop or to go ahead at your own volition, and the general statement that minerals particularly are the property of the people strikes me this way: I do not know anybody who would suggest a change of title. It just depends on what you mean by the "people". I would include in the people the pioneers of Canada who have gone out and who have been scoffed at by the government for years and years, and who, of their own initiative, have built up the mining industry which is in process of strangulation and decay. Any particular method of dealing with it, if it is for the good of Canada, has my support; but I doubt very much of the success of government enterprise in that regard and I would be very gravely concerned if an industry of that type were government run. Take, for instance, the smelter at Trail and the marvellous work they have done. I would look with a great deal of concern and a great deal of doubt on any government—and I do not care whether it is the government of Canada or the government of any other country—being able to function as efficiently.

*By Mr. Gillis:*

Q. You will admit that Russia did a very good job in developing their country in a reverse situation?—A. If you want to make Canada a country like Russia, well,—

Q. You used it as an illustration.—A. Oh, yes, but you notice that I put in a qualifying clause.

Q. You quoted Stalin very freely.—A. I did; Stalin is a marvelous chap and he has some good ideas.

*By Mr. MacKenzie:*

Q. Is not this the kernel of the matter? We have, supposedly, a democracy. Take a metalliferous mine, the smelter part would be more easily handled by a democracy than the mining end of it. How do you know how long the mines are going to last?—A. You do not.

Q. When you come to develop a mine it is an easy enough thing, as far as the prospecting is concerned, and there is no difficulty in the development because private enterprise will be as willing to waste a million dollars in a development as anyone else, but when you get the Department of Mines here to go and take on a raw prospect and advance millions of dollars to develop that prospect to try to mine gold from it, you are up against a different proposition. Suppose it was a frost, suppose that it turned out a failure—A. It often happens.

Q. What would happen to the Department of Mines and to a government which allowed the department to do that? The people would just tear it to pieces.—A. Sure they would, and rightly so.

Q. You can do that under a dictatorship where the government is not responsible to the people, but you cannot do it under a democracy. I have, I think, one of the best books on Russia that has come out for a long time; it is called "Mission to Moscow," and on page 105 of this edition you will see something about gold mining there.

*By Mr. McNiven:*

Q. Are the companies now engaged in the mining business not undertaking prospecting to quite a large extent, companies such as Ventures, Bobjo and Hollinger?—A. I am glad you brought up that question. The larger companies which have a cash balance are sending engineers and prospectors all over the country.

*By Mr. Gillis:*

Q. Are not the government now subsidizing prospectors and allowing investments in future mining property to be written off for income tax purposes? Are we not giving considerable assistance in this way, that investments in mining companies are written off for income tax purposes?

MR. MACKENZIE: In 1934 and 1935 and smaller in 1936, but some assistance was given by the dominion government.

THE WITNESS: I think in reply to Mr. Gillis' question, the only break—except in a few special war minerals—that the mining industry receives from the government is that in certain specific cases taxes have been reduced to cover chiefly obsolescence of extension of plants, which are only good for the duration of the war. In that respect the mining industry has had some relief, otherwise I do not know of any.

MR. GILLIS: I agree with Mr. Forbes' proposal that the prospector, the man who goes out in the bush and discovers a mine, should get everything out of it he can, but I am opposed to the research carried on by the government being handed over to someone who has not had a thing to do with it and exploit it for profit.

MR. McDONALD: He risks his money in it.

MR. GILLIS: When there is a sure thing there. There is no guesswork today, none whatever.

THE WITNESS: Do I understand that you object to geological—it is chiefly geological—maps and information being given to the prospector?

MR. GILLIS: No.

THE WITNESS: To whom do you object?

MR. GILLIS: I object to the government spending the Canadian taxpayers' money discovering properties and then handing them over to syndicates to be operated for profit for themselves.

THE WITNESS: Has that occurred?

MR. GILLIS: Under your scheme it would.

MR. MACNICOL: That is not so, Mr. Chairman.

THE WITNESS: No, no; under my scheme whatever is discovered belongs to the prospector, pure and simple, without any shackle. Give him all the maps you can give him, and give him all the Geological Survey Division knows, guide him, treat him as a man.

MR. GILLIS: I am quite in favour of that.

THE WITNESS: And if he finds anything—I have had twenty-five years' experience on it—give it to him. Anything you get as a prospector you deserve. Give it to him. He may spend it as he likes, but that does not make any difference. There was a prospector worked for me five years ago who finally made a strike and got \$20,000. There is no use trying to save a prospector from him-

self; let him spend his money as he likes. He works hard and if he finds anything give it to him free and help him along. Do not throttle him. That is what we have done. The old type of prospector you knew is going out; there are not many of them left. To get a man to go to B.C. I combed this country from Quebec out to the west and I finally found one in Red Lake. I know him; he is a good man. They are few and far between. We have to educate them. We do not want the type of man whose father sent him to college. He is nothing but a student; he does not know the bush. That type of man is no good as a prospector in ninety-nine cases out of a hundred. The returned soldier, who is now in the army, when he comes back, and is in good health, will certainly make a fine type for a prospector. He has learned to take care of himself, and he has learned discipline. That is the type of man I have in mind. If he were carefully selected he would make a nucleus of the first 150 prospectors, and I hope we would have a lot more than that. There is no reason in the set-up I propose that you could not handle 500; if they were carefully selected from the army I am all in favour of it.

Mr. MacNICOL: Mr. Chairman, I do not think we want to take up a great deal of time at the moment discussing as to whether mines should be opened up by the government and owned by the government or by private individuals. I think our main purpose at the moment is to try to see if what Mr. Forbes has said could be built up to provide jobs for the men after the war. This committee is a reconstruction committee. I have listened to Mr. Forbes with a great deal of interest because I have been over a good deal of the country myself. I agree with what he said about the prospector; I have met many of them. They are a very valuable part of our whole economic set-up. He is quite right in saying the prospector probably in ninety-nine cases out of a hundred really gets little out of the mine.

For instance, I had a man send me, from Manitoba yesterday, information about a manganese mine west of Lake Winnipeg. Well, if there is a manganese vein west of Lake Winnipeg and it has any quantity of manganese it would be a very valuable mine. I wrote at once to the department, telling the department to correspond with this man. I am now referring to the Mines Department. I wrote to the department suggesting that they ascertain the quantity of manganese available. We need manganese very badly at the present time. What would the government do if they found there was a large amount of manganese west of Lake Winnipeg? They would have to deal with the prospector or the government might itself interest some of the big steel manufacturing companies like the Algomo Steel or the Canadian Steel or the steel company down in my honourable friend's riding in Cape Breton, to see if they would interest themselves in developing it. The prospector will not be able to develop it. Someone must come forward with a large sum of money to open up a mine like that; but it would be a grand thing if it could be opened up. That applies to the opening up of all mines. Somebody must first put up the money. The government cannot very well do it unless we change the whole state of the economy we have been living under. I for one prefer to stay under it. On the other hand, I agree there is something in what the honourable member for North Sydney has said. The public should get something out of it. Just how they are going to get it at the moment, I do not know. That is something we shall have to decide later on. The development of the mine itself will return a good deal to the country. The gold mining industry has returned to this country not less than one billion dollars. I know very well that a few years ago, when we were in the doldrums, the advancement of the price of gold from \$20.67 to \$35, or thereabouts, gave an impetus to the opening up of all the low grade gold mines, which put this country on its feet to a very large extent. So everything Mr. Forbes has said about the mining industry is true, Mr. Chairman. It is one of the great avenues we have for providing jobs after the war.

The country at the moment does send out mining parties in the summer time. I believe they are organizing them now, if they are not already organized. The universities that have geologists and those interested in minerals likely have sent in to the government their lists of bright students whom they want to have put out as beginners in prospecting. That is financed by the government and it has been going on for years.

I am heartily in accord with it. How much it has cost, I do not know, although we put a big vote through the house for it. After these parties go out and make discoveries, maps are marked like this: "Gold, iron, coal," and so on, and anyone interested in developing those areas are allowed to do so. If they find an area in which there is a great natural resource the government will permit it being opened up. For instance, the oil sands were mentioned. Anyone can go up there to Northern Alberta and start an oil mine. Anyone going there on the Athabasca river with the consent of the Alberta government can have an area of three square miles, one mile along the river and two additional square miles back. In other words, you or anyone else, if you want to invest your money in oil on the Athabasca river, all you have to do is convince the Alberta government that you are in earnest and that you are going to try to develop oil there and they will give you the patent. I do not know that you will obtain the land yourself, but you have the right to proceed there and try to produce oil on the three square miles that you have the patent for. The government itself cannot do it very well. Somebody with money has to go in there and produce oil, and the same is true with regard to other mining development. Now, I had hoped that Mr. Forbes would have gone further in his presentation to us this morning, when he mentioned Nova Scotia coal. In my opinion the coal miners of Nova Scotia deserve unstinted sympathy.

**THE WITNESS:** I believe you.

**MR. MACNICOL:** They have come through desperate and trying times through no fault of their own. I hoped that you would make some suggestion when you talked about Nova Scotia, because after the war surely those coal miners will be properly paid. They are entitled to a proper wage and to good working conditions. They may not have been getting that; if they have not they should have been. Now, the whole of the maritimes to-day are suffering grievously through their inability to obtain gasoline and oil. I am told on reliable authority—and this matter has been the subject of investigation—that the Nova Scotian brand of coal is of similar quality and is equal to the brand of coal from which Germany is producing 100,000,000 barrels of oil a year. If that can be done in Germany it can be done in Canada, and when we do it in Canada we will have solved to a large degree the problem of unemployment and production, and provided thousands of new jobs.

**MR. GILLIS:** Standard Oil and Imperial Oil will not let you do that.

**MR. MACNICOL:** If I had the power no oil company would say that we should not do this or do that. The same applies to the position at Estevan, Saskatchewan. There we have large deposits of coal. Its oil content is not as high as that of the Nova Scotian coal, and it is a longer way away and while there would not be as much oil come out of Estevan as could come out of Nova Scotia the difference in the freight would make it an economic possibility for the province of Saskatchewan. We have many things to do, but we are not using our natural resources as we should. I am heartily in accord with the statement that we should send out more prospectors with governmental support; we should comb this country—and we have been combing it too—to find out every place where men can be put to work after this war, using our natural resources as a means to provide jobs for our workers and also to provide for a comfortable old age. I think, Mr. Chairman, that the picture presented by Mr. Forbes is one that can be accepted and more and more money should be devoted for

prospecting in this country. I am heartily in accord with that. It is one of the ways whereby, undoubtedly, this country can provide many jobs through developing its natural resources.

The witness was talking about minerals. Mineral deposits represent only one thing. Mr. Forbes said something about the salt developments at Waterways, Alberta. I believe 560 tons a week of fine salt are produced at that point. It is a very fine salt that they have there, and they are now able to supply the whole of Alberta with its salt requirements and they are now trying to provide some of the salt requirements of the province of Saskatchewan. They employ quite a number of men. It is quite true, as the witness said, that the resources of this country, through their development, can provide thousands and thousands of jobs and provide a comfortable living for people everywhere.

Mr. MacKENZIE (*Neepawa*): Who is developing the salt at Waterways?

Mr. MacNICOL: I imagine it is what is called the C.I.L. I am not sure of that.

The WITNESS: In answer to that question, I might say that the salt at Waterways has been mined by a company with offices in Montreal. It is not the C.I.L. What is that creosote company in Montreal?

Mr. McNIVEN: The Canadian Creosote Company?

The WITNESS: It is a subsidiary.

Mr. McNIVEN: The Dominion Tar and Chemical Co.?

The WITNESS: Yes.

Mr. MacNICOL: At Waterways the salt is located within a quarter of a mile of the station. A former company had a much larger plant at the mouth of the Horse river immediately adjacent to the oil sands. What amazed me was to find on the Horse river immense quantities of oil sands which are very rich and in close proximity inexhaustible resources of salt.

The WITNESS: They come in the sediments.

Mr. MacNICOL: They both lie on limestone. Well, oil, salt and limestone are the principal bases of the chemical industry, so in opening those deposits up we have the base of a vast chemical industry in the making in this country. Canada is full to overflowing with incomparable rich resources if we will only rise to the occasion and develop them, and there would not be an unemployed man or woman in this country. I concur in what my friend said that in the development of these resources those who work for the development are entitled to something, and they have not been getting a fair share in my judgment in the past. They are entitled to receive adequate compensation to enable them to lay up something for their old age, to educate their families, to take care of their wives, and to look after everything and retire at a reasonable age with sufficient to live on. The miners have not been getting that consideration in the past. I am prepared to support any legislation that will provide those who work for the development and production of our resources—the natural wealth of our country—with an adequate return for what they are doing. Commence with the prospector; he should go on a pension, because as the witness has said he never has been able to save anything. They can quote the bible by the yard and that is all to the good, but they do not lay up anything for the time when they cannot do any more prospecting work. I agree that they should be provided with a pension.

Mr. MacKENZIE (*Neepawa*): This scheme that Mr. Forbes has outlined does not provide for that. Mr. Forbes does not provide for the human nature of the prospector. I know something about prospecting because I was one of them at one time.

The CHAIRMAN: You have reformed, have you?

Mr. MacKENZIE: There is no scheme to provide for the prospector.

The WITNESS: May I reply to Mr. MacNicol because it gives me an opportunity which I should have availed myself of before, of paying a great tribute to the various governments of Canada for the way in which they have supported geological parties working throughout the whole country, and from them we as prospectors proceed. As a matter of fact, I have a prospecting company—I have been running it for fifteen years—and we as prospectors obtain the most valuable series of maps, and we can eliminate from these maps large sections of the country which are not promising, and we can ascertain from the government maps, with which we are provided, the most likely places for mineral deposits. That in itself is a valuable service and is often not appreciated. To the personnel of the Geological Survey of Canada and various other departments which have to do with mining we owe a great debt of gratitude. I have met mining engineers all over the world, and I know of no finer collective group than the members of our geological survey and the associated government officials in mining. It gives me great pleasure to make this statement.

Now, I should like to say a word with regard to the coal industry of Cape Breton. I happen to have been born in Newfoundland so I know Cape Breton fairly well. As a matter of fact, one of the first jobs I had in my life was digging post-holes in Sydney when we were putting up a line. In my opinion, the coal miner has had a just grievance, and without criticizing anybody in particular I can say that the coal miner has not received, in general, what he deserves.

Mr. MacNICOL: He certainly has not.

The WITNESS: Next to the prospector, as regards ill treatment, I would put the coal miner of Cape Breton. We must inject, and we do inject in the gold mining industry a sense of fairness to our employees. Those who run the coal mining industry have got to be human. In twenty-five years' experience I have had only one strike. I paid my men well whether the going was good or bad. At 10 o'clock in the morning I was always in the office to hear any grievances the men had, and if they had a grievance I adjusted it. If they were just no good and were chronic kickers I got rid of them, and I kept any mine I had anything to do with a happy family. Unfortunately, in Cape Breton that is not true. They have recurring strikes. At the base of that really has been injustice over a period of years—and I know what I am talking about—or what I consider injustice to the Cape Breton coal miners. In order to make a happy man we have got to compose our views, and if it were necessary for me to pay \$1 a ton more for coal to make that man happy I would pay it gladly, and the average inhabitant of Canada also. That problem has got to be tackled in a broad way and from the standpoint of justice, as I brought out in the early portion of my brief. I have seen that happen in other countries, but the Cape Breton miner in my opinion has not had it, and the authorities who have to deal with him should bear that in mind. He has a just grievance which rankles, and that is not right, and it is not necessary. I know that something can be done to cure that; you cure it at the source, and you make a happy and contented man. Treat him right. If the price of coal is not high enough to suit him, put up the price of coal.

Mr. CASTLEDEN: Are you sure he will benefit if you put up the price of coal?

The WITNESS: I prefer not to answer that.

Mr. GILLIS: I know he will not.

Mr. JEAN: I gather from your statement that in a general way you do not want to let things go on as they have been going in the mining industry, and you want a scheme planned which will organize the opening up of Canada,

so far as the mining industry is concerned, and you are starting with the prospector. Now, have you in mind any particular districts which have been prospected and are now ready to be opened? Do you know if there is some district which has already been prospected by private individuals and which is ready to be opened for development now? I do not want you to commit yourself.

The WITNESS: No. My brief submits that the whole country should be prospected.

Mr. BERTRAND: Whatever the possibilities are?

The WITNESS: The only district I can refer to is a district down on the northeast shore of the St. Lawrence, down in the Saguenay region.

Mr. JEAN: Call it the Saguenay district.

The WITNESS: Yes, in that district. They say you should never let sentiment interfere with business, but I do not believe in that. There is a population down there which needs help, they are undernourished, the farms are poor ones. And right in their back yards there is enough mica, muscovite mica—not the type they get up at Buckingham, but the type that comes from India—that an industry could be established there to replace the Indian mica. It would take this form, that the farmer would work those deposits. They are what are called pegmatitic deposits. There are many of them scattered down the coast. There should be a central grading station which is the key of the mica industry.

Mr. JEAN: And which does not exist at the present time?

The WITNESS: Not at the present time. The farmer or the small operator with his son could send that stuff to a central station and have it properly graded and produce a graded market product. That is one place where I think help should be given.

Mr. JEAN: Would that be useful for war purposes?

The WITNESS: Oh, yes. It is a little outside of the scope of my brief because I was referring to pressing war needs.

*By Mr. McDonald:*

Q. Speaking of the prospector, have you read or heard an address recently given by a prominent mining man in the Rouyn district—his name escapes me at the moment—to the Mine Manager's Association of Ontario and Quebec with regard to prospecting? He stated, as you stated, that within the last fifteen years we have been working out our old mines and new ones are not coming into existence. After pointing that out he made the statement that throughout that district, in his opinion, while the ground had been thoroughly prospected, no new discoveries had been made due to the fact that there are no more outcroppings, and as a result the Mine Manager's Association thought that prospecting should be developed along a scientific basis, so organized that they could go to depth; and along with that it was suggested that some of the wealthy mines should set aside a portion of their funds each year for that purpose. Have you seen that address?—A. I know of it in a general way. I know the Rouyn district quite well. The general remark that most of the outcroppings have been seen is true, and further developments in that particular area, which is a comparatively small one when considered with Canada as a whole, will probably have to take the form—

Q. His argument was that the over-burden is such to-day that the ordinary prospector cannot find the gold although it is there.—A. That is quite right. Further development in that particular section will have to take the form of intensive mapping and diamond drilling for exploration purposes. Every camp has gone through it: Porcupine, Hollinger, Dome, McIntyre—they were

all on the surface—but a great deal of the stuff in the Porcupine camp to-day comes from veins that are under swamps, and they have crept up on us and we have learned as we went along. It is a cumulative process. One or two mines have been brought in in the last few years—more than that, three or four—on purely geological work and diamond drilling sometimes through 200 feet of ore. They are refining the art, but so far as the prospector is concerned in the brief I have set up, there are tens of thousands of square miles where there are outcroppings that have never been seen.

Q. What about aerial photography?—A. Aerial photography is a useful adjunct. You can see a lot of things from the air; you can see the main folds and in some cases you can see outcrops. I have flown 250,000 miles in my life, and the aerial photography is extremely valuable.

The CHAIRMAN: Gentlemen, before we close I may say that Nova Scotia has been discussed here to-day and we will have further evidence regarding that condition on Friday and that will probably finish our investigation into that industry. On Friday Mr. Fairweather of the Canadian National Railways and Mr. D. W. McLachlin of the Department of Transport will be with us as witnesses.

Now, Mr. Forbes, I am sure you have held everybody here to-day in rapt attention, and the only objection I would voice with regard to what you have said is that you mentioned the California gold rush and then you jumped to the Yukon gold rush and you did not say anything about the Cariboo gold rush which did more for Canada than any one single event, because it extended confederation from the Atlantic ocean and the valley of the St. Lawrence, across the prairies to the mountains and then to the Pacific ocean. That rush occurred at the time when confederation was under discussion, and I am only pointing out to you what you know concerning Cariboo, and I am endorsing a good deal of what Mr. Forbes said. A good job has been done for Canada by the prospector and the man who, of course, was looking to improve his standing in life, and in doing so he extended Canada, and when the panic legislation which was mentioned was passed some years ago the ordinary prospector in British Columbia was killed, he was handcuffed, shackled, and it was not understood at that time that in shackling the prospector they were beginning the destruction of the mining industry, and we are now beginning to pay the price for that false legislation. I feel that something along the lines suggested by Mr. Forbes would bring back both the prospector and prospecting and would aid very very materially our work which is designed to bring about more industrial and mineral activity and therefore aid employment. To-morrow we shall have with us Mr. Berube who will speak on fisheries and what employment possibilities lie in the development of the fishing industry of eastern Canada.

Mr. McNIVEN: Mr. Chairman, I should like to place on the record our appreciation of the courtesy of Mr. Forbes in coming here to-day to give us the benefit of his experience and also his suggestions in regard to this very important matter. We thank the witness very much.

The committee adjourned to meet Thursday, May 20, at 11 o'clock.



Canada - Reconstruction and Re-establishment  
- p.c. Ctee on, 1943/44

SESSION 1943

(HOUSE OF COMMONS)

| SPECIAL COMMITTEE

ON

# RECONSTRUCTION AND RE-ESTABLISHMENT

MINUTES OF PROCEEDINGS AND EVIDENCE

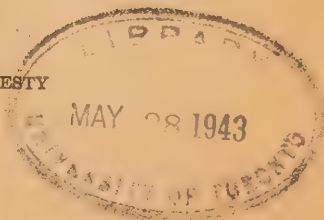
No. 14

THURSDAY, MAY, 20, 1943

WITNESS:

Mr. Louis Berube, Professor, School of Fisheries, Quebec

OTTAWA  
EDMOND CLOUTIER  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1943





## MINUTES OF PROCEEDINGS

THURSDAY, May 20, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11.00 o'clock, a.m. Mr. J. G. Turgeon, the Chairman, presided.

The following members were present, Messrs. Bertrand (*Prescott*), Black (*Cumberland*), Brunelle, Castleden, Ferron, Gillis, Hill, Jean, Mackenzie (*Neepawa*), MacNicol, McKinnon (*Kenora-Rainy River*), McNiven, Matthews, Nielsen (*Mrs.*), Ross (*Calgary East*), Sanderson, Turgeon and Tustin.—18.

The Chairman informed the Committee that Mr. Quelch, who has been a very regular attendant at the meetings of this Committee, has been absent on account of an accident but will soon be back.

Mr. Louis Berube, Professor, School of Fisheries, Quebec, was called. He presented a brief and was examined by the Committee.

The Chairman had occasion to leave, and Mr. McNiven, the Vice-chairman, took the Chair.

On motion of Mr. Jean the Committee agreed to print the whole of Mr. Berube's brief although only a part of it was read.

Mr. Gillis moved a vote of thanks to the witness for the useful and informative presentation he made on behalf of the fishermen. This was tendered to him by the Vice-chairman and the witness retired.

The Committee adjourned at 1.00 o'clock, p.m., to meet again Friday, May 21, at 11.00 a.m., when Mr. S. W. Fairweather, Chief of Research and Development, Canadian National Railways, and Mr. D. W. McLachlan, Department of Transport, Ottawa, will give evidence respecting Nova Scotia Coal and the Canso Strait.

J. P. DOYLE,

*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

May 20, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11 o'clock a.m. The Chairman, Mr. J. G. Turgeon, presided.

The CHAIRMAN: Ladies and gentlemen, we are ready to start our proceedings. May I first make a purely personal remark. I have noticed for some days that Mr. Quelch has not been sitting with us, and as he has always been a very active member and a member of our steering committee I thought others might have wondered why, and I may tell them that I have just found out that his absence is due to an accident which has laid him up for a while. I merely mention that because he was such a faithful attendant at our meetings.

Now, we have with us this morning Mr. Louis Berube, Professor of Fisheries Economics and Assistant Director of the Social-Economic Service, School of Fisheries, Sainte Anne de la Pocatiere, Kamouraska, Quebec. Mr. Berube has a brief which we hope will make a contribution to our work with regard to post-war conditions, and I shall ask Mr. Berube to come forward now.

Professor LOUIS BERUBE, called.

The WITNESS: Ladies and gentlemen, due to an accident I met with while skiing I am unable to stand very long, so I shall crave your permission to remain seated. The question I have been asked to submit to you pertained especially to the fisheries of the province of Quebec. However, what I shall have to say can apply to the whole of the Atlantic seaboard because conditions in Quebec are almost the same as those in Nova Scotia, New Brunswick and Prince Edward Island. When I am making reference to a specific case in the province of Quebec I shall mention it. We cannot study reconstruction without bringing in the question of provincial and federal jurisdiction. May it be stated here that this is not my province, nor is it within my competency to deal with that matter. Those who are in authority will have to decide whether a problem may arise from the recommendations we have to discuss with regard to fisheries.

There are two solutions to any post-war problem: let things work themselves out or through planning keep them well in hand until the world has recovered equilibrium in the economic, social and political fields.

If the first one prevails, on account of the progressive cuttings on consumer goods production in the war economy and on account of the excess money circulation created by war prosperity, the world's purchasing power, in the very first years after cessation of hostilities, has a fair chance not only to stay at the present high level but even to increase. We may expect, in the producing countries at least, a post-war boom, but there is also some danger of post-war inflation, which is not so good.

And afterwards when the demobilized soldiers and war workers come into the picture, what happens? If they stop drawing their pay or are thrown out of work with the unavoidable curtailment of war production, the national income of the country shall suffer a first drop. A drop in consumption shall follow, throwing some others out of work and cutting a second slice in the consumer's buying power. So on and on until we are back in the ruts of a depression that this time will shake to the very bottom, if not destroy, all the political, economic and social institutions that democracy is now fighting for.

As to the second solution, although planning is no universal panacea nor infallible cure, it has at least, when coupled with intelligent action, a fair chance to hold in check post-war inflation and to keep to a minimum hardships and handicaps while we move over from a war to peace economy.

Planning and action however should not be an exclusive business of the state, although some economists show rather a tendency to throw the whole problem in its laps.

Government shall have the leading part in reconstruction. It is the common meeting ground of all our interest, the natural coordinator of all our activities. Moreover in some particular fields, its direct action is essential. For instance to keep the consumer's purchasing power at a fair level and thus avoid serious unemployment, some kind of control of prices and distribution, not unlike the present one, shall have to be exercised. Here is a government job and one of direct action too. Then in shifting from war to peace time production, there shall be slacks here and there in the rate of employment. These should be absorbed by public works of national utility, even if they pay dividends in the long run only. Here is again another government job.

However we are not in favour of letting the state shoulder the whole burden alone nor do we want it to run the whole show alone. The problem we shall have to have to run when war is over appears already too big and too complicated, and nothing less than intelligent cooperation and energetic action of all those interested can swing the job over. Even then, government shall be called upon to help collective enterprise. But if it is given to social and economic institutions which have at least an even chance to become self-supporting in years forthcoming, such help as granted will not only and simply see the people through the post-war crisis or readjustment but prove itself a sound investment in permanent social security.

In the Dominion of Canada a scheme of reconstruction, including social security with some government action, appears to raise immediately the question of federal versus provincial rights and may turn into a tug-of-war contest between the dominion and the provinces. Let our legislators and political science experts get their heads together and solve the problem. As it is, it is beyond the scope of the present report, let alone the competency of the writer.

There is a great activity going on in post-war planning and the thing is very commendable not only for the public at large but for those too who are now fighting for us. It is, or at least should be, quite a relief for them to know that their gallant efforts shall not be wasted nor the blood of many shed in vain, but that over and above contributing in weapons and food to win the war, the civilians left behind are busily engaged in insuring them the safe and sane post-war world they so highly deserve.

In the Quebec fisheries more than in any other of the maritime provinces, we have another and a very special reason to launch right away in planning in order to be ready in due time for action. Before the beginning of the last war, our fishing industry and fishermen had come to grips with a deep crisis. Such as it was, it presented us with the same problems which the post-war crisis certainly would if we chose again to let things work themselves out, as we did then, out of surprise. If we do not want to experience again the bitter taste of chaos and misery, nor to pay the same high prices for fatal hesitations and delays, let us plan ahead and be ready for intelligent action when indicated. Lessons taken at such a cost should not go to waste.

This report deals mainly with the Quebec maritime fisheries problem. However, conditions are now and shall be much the same in other provinces, namely, on the eastern shores of the Dominion of Canada. *Mutatis mutandis* of course in each particular case, the study itself as well as its conclusions and recommendations can and may be used elsewhere.

## PREWAR CONDITIONS

Although this report must have some limitations in length, the story of the prewar depression in Quebec fisheries is worth a few lines. In fact, the 1931-37 period is the darkest in the whole history of our fishing industry and it is very doubtful that the post-war era will present us with such a sad picture of chaos and misery and with a bigger problem of reconstruction.

## CAUSES

Many were the causes of the 1932 crisis in the Quebec fisheries. Some were common to other industries and trades, for example the general curtailment of the consumers purchasing power. Some others were special to fisheries. Among them may we mention the loss of export markets. Some of them perforce had to be abandoned; on some others, our positions became precarious and our products were partly chased out through the competition of other producing countries. The largest export outlet for our prime Gaspé cured dry codfish had so far been Italy, and as a natural consequence of the nationalistic economic policies of Mussolini, it was completely lost in 1933. On the other export markets, we somewhat neglected to steady our positions as long as the Italian channel remained open. Meanwhile, in South America for instance, other producing countries established themselves firmly and when we tried a comeback, they held on. They could easily quote and in fact quoted lower prices than our grade of product would permit.

Even in West Indies, United States and England, not only for dried codfish but for many other of our fishery products, could the pinch of competition from other producing countries be distinctly felt.

## NATIONAL MARKET

Chased out of our export markets, our production had to fall back upon our national market. But as things were, it had to be conquered from scratch up. It was held by maritime fishing concerns who had a good twenty-five years start ahead on our shippers. Their products were well known and accepted and they would not willingly grant us a share on a market they had to fight for and conquer from the United States shippers of fish in 1908 and following years.

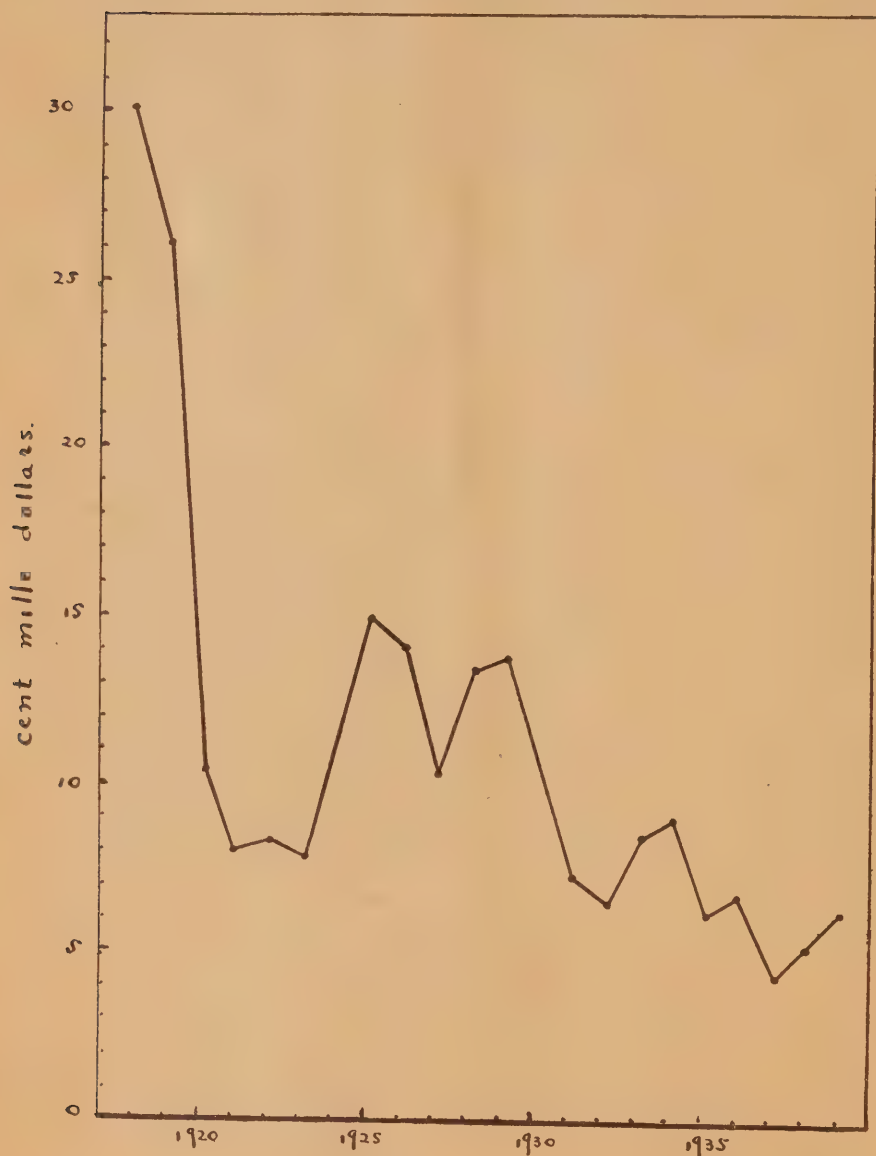
Next, we did not produce what the Canadian consumers wanted. So far our production had been one of salt and dried fish, and the national market called for fresh fish, fillets in particular. A progressive conversion of our whole scheme of production was required and it was no small job to tackle. At last there were no cold storage facilities on the Quebec maritime shores nor any trained labour for the new processes. Last and no small drop either in this already overflowing bucket was an unfair discrimination in freight and express rates. Believe it or not, in 1930, it cost from one-half to three-quarters of a cent a pound more to ship fresh fish from the Gaspé coast to Quebec, Montreal and Toronto than from many New Brunswick and Nova Scotia points, several times more than 200 miles farther from these common markets.

## INCREASE IN THE NUMBER OF FISHERMEN

This was enough to wreck any fishing industry and it wrecked ours (See graph I). Over this, came an absolutely abnormal increase in the number of fishermen. Every year before 1930, many whole families and young men coming of age left the fishing shores for the inland industrial centres. This normal migration helped in keeping the number of fishermen somewhat adjusted to the capacities of the industry. But after 1930, not only did this emigration stop, but soon

## I

DECREASE OF QUEBEC COD FISHERIES—PERIOD 1918-1939  
TOTAL MARKET VALUE



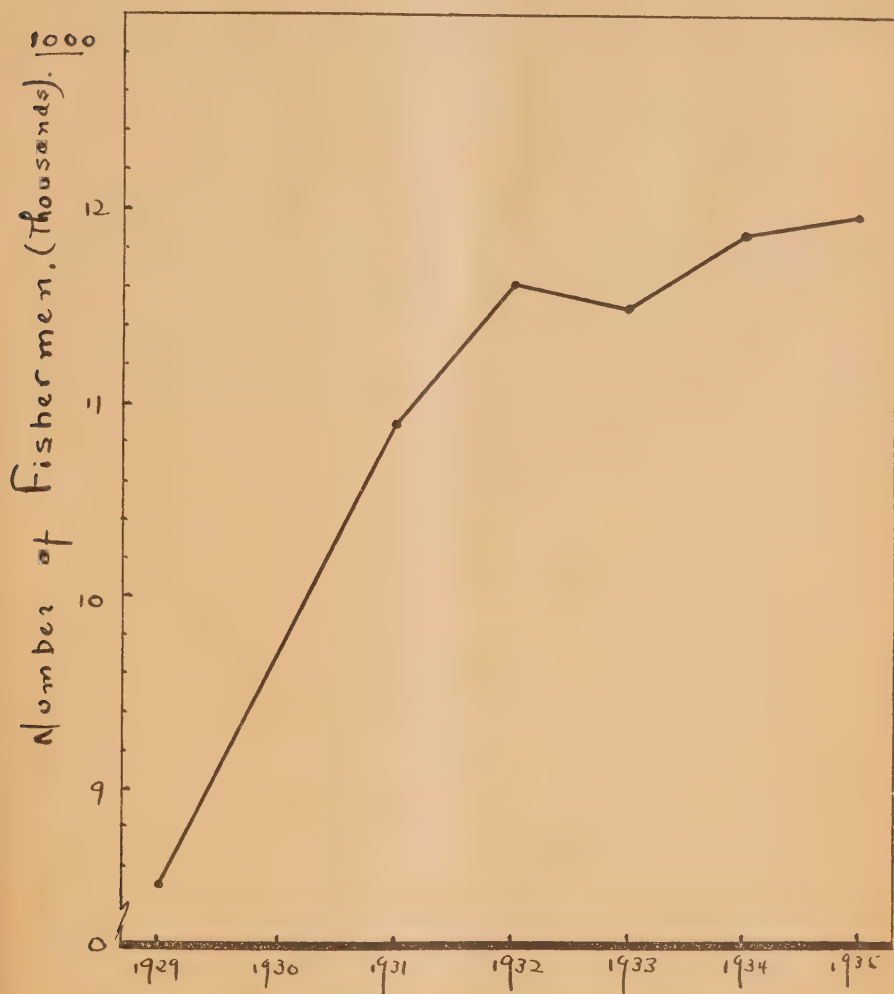
began the sorry return pilgrimage of those who had migrated in the pre-depression years. From 1929 to 1935 there is thus a net increase of 40 per cent in the number of fishermen (Graph II), while the index of the landed value of fish drops to 56.

### DARK YEARS

What could come and in fact came out of such a mess, one can easily imagine. Average fishing returns decreased to an unprecedented low level. In fact in 1932

## II

INCREASE IN THE NUMBER OF MARITIME FISHERMEN—PERIOD 1929-1935



as compared with 1926, the index of average fishing income dropped to 42, while codfishing income struck the low bottom of 30. From their toils, fishermen could no longer wrench even the bare daily bread of their dependents. Sheer poverty and misery prevailed on all our maritime shores. The dole was introduced as an emergency relief measure but had to become kind of permanent. In many fishing communities all the fishermen were on the direct relief payrolls for the winter months, many throughout the whole fishing season. In fact, the writer has personally investigated many individual cases where the state allowance, although small and meagre, brought more money home than fishing could do. As they were not allowed both at the same time, many were those who rightly chose to leave their boats ashore.

### RECONSTRUCTION

Individual enterprises and co-operatives started reconstruction but they could not and did not go far by themselves. The governments of Quebec and Ottawa had to step in, the former creating cold storage facilities and helping production and marketing, the latter contributing through publicity campaigns, promotion of adult education and bonus on salt fish; both coming to the rescue of needy fishermen by grants on new boats and riggings.

Under this new impetus things improved at a faster pace. Production accomplished its conversion from dry to fresh fish and reached the 50 per cent mark last year (Graph III). Canadian and U.S. markets were reopened and we appropriated a decent share of them. An appreciation of our accomplishments on this particular point may be found in the report of the Fisheries Economic Conference of Nova Scotia held in 1938. At page 46, one may read these lines:—

“A few years ago, Gaspé marketed practically all their codfish in the salt state. To-day for about six months in the year, they are very big factors in the Canadian market and in some of the best consuming centres they have practically driven Nova Scotia fresh cod fillets off the market during the summer and fall months.”

## III

## MARITIME FISHERIES OF QUEBEC

Chart showing decrease of dry codfish industry and corresponding increase of fresh and frozen fish trade on the Gaspé Coast, 1932-1942  
Per Cent of Total Catch



On account of the low purchasing power all around, the price levels did not advance very much and kept the fishermen's income at a corresponding low level. Dole and direct relief, however, were cut for summer months and reduced quite in a large measure in winter. Land settlements, agriculture gardening and forestry brought their contribution. But it took the present war prosperity to finish the job.

The forced withdrawal of Denmark and Iceland from Central and South American markets opened again the door to our salt and dried fish. England, cut short from her customary supply channels, called for our cod fillets and, elsewhere in Canada, for canned fish. United States is asking for more and more of our production. Unimpeded in the first years by the regulations of the Wartime Prices Board, the price levels of fish began to rise, reached the World War I mark and kept on climbing. This year a ceiling is being put on, but at very fair figures. Such an incentive, a better price for fish, gave fishing a new life. Production jumped from 715,911 hundredweights in 1937 to 909,238 in 1939 and topped the million mark in 1942 with 1,048,771. From 1937 there is a total gain of 45 per cent, but if the increase is only 10 per cent from 1939 to 1942, one must not forget that it was accomplished against a 10 per cent decrease in the number of fishing hands.

Here is in short the story of the first depression in the Quebec fisheries, with the collapse of the industry, its abnormal increase in the number of fishermen, its chaos and miseries, and its slow and painful reconstruction. Is it not a true picture of what would happen again after this war, if things were left to straighten out by themselves?

### THE POST-WAR PROBLEM

Many are the predictions as to what this post-war period will bring to the world at large and to individual countries in particular. Some prophets, and happily a very few, forecast a collapse of first rate magnitude, and not unlike ostriches they are now looking for a patch of sand to bury their heads in. Others offer no predictions but they do no planning: they do not know nor try to have at least an idea of what may happen and they are resigned to accept things as they come. Others at last claim that the post-war period shall be what we make it and they have already started studying and planning to be ready for action when indicated. It is hardly necessary to add here that many already belong to this third category and that many more are coming in by and by. It is the only right attitude towards reconstruction, and even if we run later against some unforeseen handicaps derived from miscalculations in planning, the stimulus given to all "of working towards a definite and clear cut goal" should have created a momentum strong enough to carry us through an incoming emergency.

### THE GOAL OF RECONSTRUCTION

In crossing a fast flowing river one has to aim far above in order to reach safely the landing point and if one does not do so the boat is going to beach far below it. The same is true in any reconstruction programme. We fight for a better world, let us fight for the best one and get at least a better one. This is a vital point. If the world is going back to the same maladjusted economy, same political strifes, same social or class misery as before, all the fighting, all the bloodshed, all the sacrifices are wasted. And let us be very careful lest after the struggles have ended on the battlefields, the fight keeps right on, but at home this time.

Some economists have already set up their goal close to perfection. The United States National Resources Planning Board, for instance, wants the post-war economy of their country kept up at present war levels for a start,

and at even higher levels in years after. This is the goal they have set for purchasing power and rate of employment in particular. They rightly claim that if for destruction, a war economy has reached such achievements as it has presently, a peace economy devoted to the welfare of humanity can do better at least as much. And here are the words of President Roosevelt himself:

The tremendous productive capacity of our country, of all countries, has been demonstrated. Freedom from want for everybody, everywhere is no longer a Utopian dream.

Recent surveys have shown that the assertion is far from being completely wrong. Tremendous are the possibilities of production and of employment if the purchasing power of the average and lower classes of our populations were progressively raised to higher and higher levels. War prosperity has thrown quite a clear light on this. If the flow of civilian goods had not been hampered by the necessities of war economy, how many things rated as luxuries before and the privilege of a very few, would have, by the new standards of living, become necessities and been purchased by the greater number?

Ours is a very poor economy indeed if it has to have destruction on such a frightful scale to show its possibilities and something is fundamentally wrong and subversive in our economic system if the capacities power production has shown in this ghastly war cannot be harnessed to the welfare of humanity. These are not sentences taken out of a thinker's volume but feelings we all have deep in the bottom of our hearts.

Planning of this kind and for such goal, however, should be done on a large scale, the scale of international economy. No individual country could achieve reconstruction by itself unless it has within its boundaries the right blend of natural resources, capital, labour and purchasing power. Even then, the achievements could hardly be of a permanent nature unless barriers high and strong enough are built up against importations from other countries, which at the same time would prohibit exportations. This policy of isolation is of very problematic success. There is an old fundamental law of economics against it, and in international economy if it leaves a certain margin to play with, such law cannot be completely ignored nor constantly broken without punishment.

This high goal of the United States National Resources Planning Board is at least debatable and worth a fair trial. If ever reached, it will not be otherwise than through gradual forward steps. Let us then be reasonable on the whole matter and for a first step in our own country, see that the war prosperity, which has already achieved a far better income for the poorer classes, is not too badly battered while we move over from war to peace economy.

### FISHERIES AND RECONSTRUCTION

What is the position of the fishing industry of Canada in the whole set-up? Farming in hard times can fall back on itself and produce for home consumption only, at least until the storm is weathered. Fishing enjoys no such privilege. It is a food production enterprise and in one single trip each individual fisherman can bring home the provision of a whole year. He has to sell whatever he brings in any other day. Thus the economic structure of fisheries is built upon the sale and the price of fish, and about both in the post-war era, let us hope for the best but at the same time, get ready for any less pleasant eventuality. It is wiser after all in fisheries reconstruction to have an agreeable surprise in the end than be lulled to sleep first and then get a rough awakening when too late.

Let it not be forgotten either that in national prosperity, fisheries as an industry and fishermen as income spenders have to contribute their whole share if full success is ever to be reached. Fishermen as a class of the society cannot, and would not either, sit quietly through the fight and then claim a share of the victory they did not struggle for.

As it is, the whole problem of Canadian fisheries reconstruction has three main aspects: world's, national and individual. The two former are dealt with presently, the third one, in the whole following chapter.

### WORLD CONDITIONS

World conditions will play here a vital part and the behaviour of our fishing industry and of markets for our fish shall be for a large portion in function of both world consumption and production of fish. Both are worth careful consideration.

At the present time all over the world, there is quite a scarcity of fish. In fact for the 1943 season, on the markets controlled by the allied nations, and for salt fish only, there is a visible demand of 228,000,000 pounds with only a visible supply of 114,000,000. Before the cessation of hostilities and in the very first years after, such scarcity is bound to increase. With every conquest of our armies, new populations will come under the care of the allied nations and a new demand for fish will be created. Even if the internal economy of the conquered countries should break down and their purchasing power come next to nothing, these people have to be fed.

"Europe after the war," writes Mr. Fadyen, a director of the Cooperative Wholesale Society of England, "will be faced with a problem of economic and social reconstruction even more formidable than that of 1919. The area of conflict and of enemy occupation is wider, the attempt to bring the whole economic life of the continent into the service of the German war machine has been more thoroughgoing and probably more successful. The collapse of this war economy, which must succeed, if it does not precede an allied victory, will throw European production and distribution, including that alternated section of it which caters for normal civilian needs, in a state of chaos. The first need will doubtless be for relief, particularly food relief, and for a short period, we may look forward to emergency distribution by military or other authorities." (Cooperative Information, No. 4, 1943).

Fisheries are next to agriculture in food production and if the situation is what Mr. Fadyen says it is going to be, some scheme will have to be devised to provide these people with fish. Meanwhile the prices to fishermen would have to stay at a very fair level to keep supplies coming from producing areas.

So far so good for Canadian fishermen. But this state of affairs shall be transmit only. The evolution of world's fish production will bring in a change. The present scarcity of fish is a direct result of the world's war economy, requisitions of ships and boats from the war navies, of manpower for warfare and war production. It shall not last forever.

The countries that "per force" had to drop out from world's production shall come again in the picture in years forthcoming. One by one, some quickly some slowly, they will reorganize their fishing fleets and resume fishing. They will at first try to supply their home market, but like a rising tide, their products will appear again and in increasing quantities, on markets we have to supply at the present time all by ourselves.

The impact of other producing countries will reach its peak when the highly mechanized fishing fleets of England, Germany, Russia, and Japan, and the mixed fleets of Norway, Denmark and a few other countries will be again on their pre-war capacity of production. What will come out of the clash? There was no scarcity of fish on the markets of the pre-war era. Thus the

competition might be keen. Our products did not then always have the upper hand. They might be, partially at least, chased out again.

In the post-war era, if there is a hope of reconstruction along social, economic and democratic, rather than purely nationalistic lines, there might be danger also of an outburst of nationalistic economic policies. Better anyway consider this as a possible, if not very probable, eventuality.

In fisheries this is feasible in larger and densely populated countries where the home market can absorb the whole national production. But many of the best producing countries, Canada, Norway, Denmark, Holland and Newfoundland, for instance, are and have always been exporters, their national markets absorbing only a minor part of their annual catch. The only markets left them would then be in the countries where native fisheries are not yet able to supply national demand. The list of these is rapidly shrinking in number, efforts being made everywhere to push production with a view to alleviate the present shortage. Some of the South American countries have their program under way, and the West Indies, Jamaica and Porto-Rico, in particular, are following the same lead.

Should they succeed, the prospects for our Canadian exporters during reconstruction may lose some of their present bright sheen. Let us not quit, however, on such a pessimistic note. United States and the British Commonwealth of Nations have always been in the past steady buyers of Canadian fish. In the last ten years before the war, they absorbed together an average of 86.6 per cent of our total yearly exports, and during the war they have increased their purchases to the limit of our available supplies. There certainly appears to be no reason why, in the post-war era, such good and steady customers should abandon us.

#### NATIONAL PROBLEM

Nevertheless, sometime after the war the demand for Canadian fish will begin to slacken on world's markets and, with years, more and more of our production will have to rely on the national market. How will it behave? Canada is an exporting far more than a consuming country, and Quebec in particular. Not so long ago close to 90 per cent of our Quebec fish went to foreign countries.

If reconstruction in other industries has then met with a reasonable measure of success and held employment at a fair level, the purchasing power on our home market would keep at a fair level, and then the remaining accumulated reserves of the war period (if any at the time) could only be raised higher. Upon this could be built a larger consumption of fish. There is place for such an increase. Our "per capita" is only about 20 pounds when in some European countries it reaches 40 and even 60 pounds.

As it takes more than two pounds of whole fish for each pound of finished products, with a population of 11,000,000, each pound gained on the average per capita disposes of 20 to 25 million pounds of fish, landed weight. One can grasp the possibilities. For a gain of 10 pounds in consumption, 200 to 250 million pounds of fish more would be absorbed on the home market, or the production be increased that much, without disrupting equilibrium. In Quebec, the average production of fish is around 90 million pounds landed weight, some 45 million of most finished products. With a population of 3,000,000, it would be a per capita of 15 pounds only, if we could produce all the consumer asks for, a goal, however, we are sorry to state, which is yet far from within our reach.

There is no grave doubt that anytime after this war we could dispose of a normal catch without undue strain, but this is not the problem. In war production, Canada is one of the few fishing countries left to supply the world's market controlled by the allied nations. In order to alleviate the food shortage and with

the incentive of high prices, we are now moving towards and above normal production that we shall try to raise higher and higher with the years. As, through voluntary enlistment in warfare and war production, the number of fishermen does not appear to increase (on the Gaspé Coast of Quebec there is even a 10 per cent decrease) this increased production has come through greater efficiency of the individual unit of labour, the fisherman, which efficiency can be brought partly through harder work but mostly through better methods of capture; in other words, through the mechanization of our fishing fleet.

Mechanization is the last word in efficiency and for many particular types of fish it can increase the catch five-fold or more for the same number of fishing hands. It is a powerful instrument in production. If the shortage of fish is acute and persistent mechanization has to be encouraged, even pushed to the limit, whatever the consequences to be faced later. Food is a weapon and fish is a food. Nothing else should ever count if it is a case of such acute emergency.

However, here is what we are heading for. At the end of war prosperity, we would have a far above normal production of fish coming from a highly mechanized fleet operating with a minimum of fishermen. No harm is in it as long as there is a scarcity both of fish and of fishing hands. This would be well and good, in the stabilization stage, if there was plenty of employment in other fields of production wherein a surplus of labour normally coming to the fishing industry could be diverted. This is not so good but it would be a solution if the whole problem could simply be dropped in the lap of the government. Modernization of our fishing fleet, in principle, is a commendable thing, and the facts and figures of the following chapter will demonstrate that it is a necessity in normal times, for the Quebec fisheries at least. But in post-war readjustment a high and efficient production of fish may prove an asset of doubtful value, in particular if there is then an increasing number of fishermen, a decreasing demand for fish and a scarcity of jobs in other fields of employment. This is a possible eventuality. And then a fully mechanized fleet shall automatically limit to the minimum the number of hands to revert to fishing and, in no small way perhaps, work against reconstruction itself.

### THE QUEBEC DILEMMA

Ottawa encourages the modernization of our Canadian fishing fleet through substantial grants on new boats or remodelled fishing crafts. It has removed the ban limiting the number of trawlers on the Atlantic Coast. In a communication to the Financial Post, the Hon. Mr. Bertrand, Minister of Fisheries, has announced that the programme is under way.

The Ottawa grants are available to Quebec fishermen and fish producers, and credit facilities are put at their disposal by their local government. Therefore Quebec could mechanize its fishing fleet but has not accomplished much yet in the way of it. Up to the war, even with our rather ancient methods of capture, our fishermen caught more fish than they could sell at fair advantage and the war production increase has been brought up through harder toil more than through increased efficiency. New boats are built and new gears are bought every year, but they are of the same type and class as before.

Thus perforce of things in Quebec we are running a gamble. In the remaining years of war and post-war prosperity our individual fishermen are losing the higher income they could get from more efficient methods of capture, not to mention their lesser contribution to the alleviation of the present food shortage. But in the true and hard reconstruction years that will come later, the fishing industry thus keeps the door open for the safe reincorporation of a larger number of fishermen.

Which is best? There are too many unknown quantities in the equation, but here is a personal opinion: Quebec should start for good some mechanization

of its fishing fleet, but, on account of the yet unknown, it would be safer to keep things on an easy gait until the post-war period of instability is ended. And when we shall see more clearly ahead, and when openings are created in other fields of employment, the whole programme should be pushed through to completion.

### SOCIAL SECURITY AND FISHERMEN

Since we are fighting for a better world, the whole post-war problem in fisheries goes far beyond finding a sufficient number of holes in which every demobilized soldier or war worker hailing from the maritime shores can crawl back to the same hardships, the same low standards of living, the same social misery as prevailed in the pre-war era.

The old fisherman happy and content smoking his pipe at the door of his fishing shack makes a nice picture for artists. The models are seldom encountered on the fishing shores; the happy and contented looks are borrowed for the occasion. And those who have worked among our fishermen, shared their toils and miseries, partaken of their meals, slept in their often barely comfortable quarters, know that the real picture is altogether much different.

### PAST EARNINGS AND INCOMES

The lot of fishermen has never been a very happy one, and we do not mean in Quebec only but in many districts of the maritimes too. In the past centuries, the historians are unanimous on that point, they were half slaves to foreign fishing concerns.

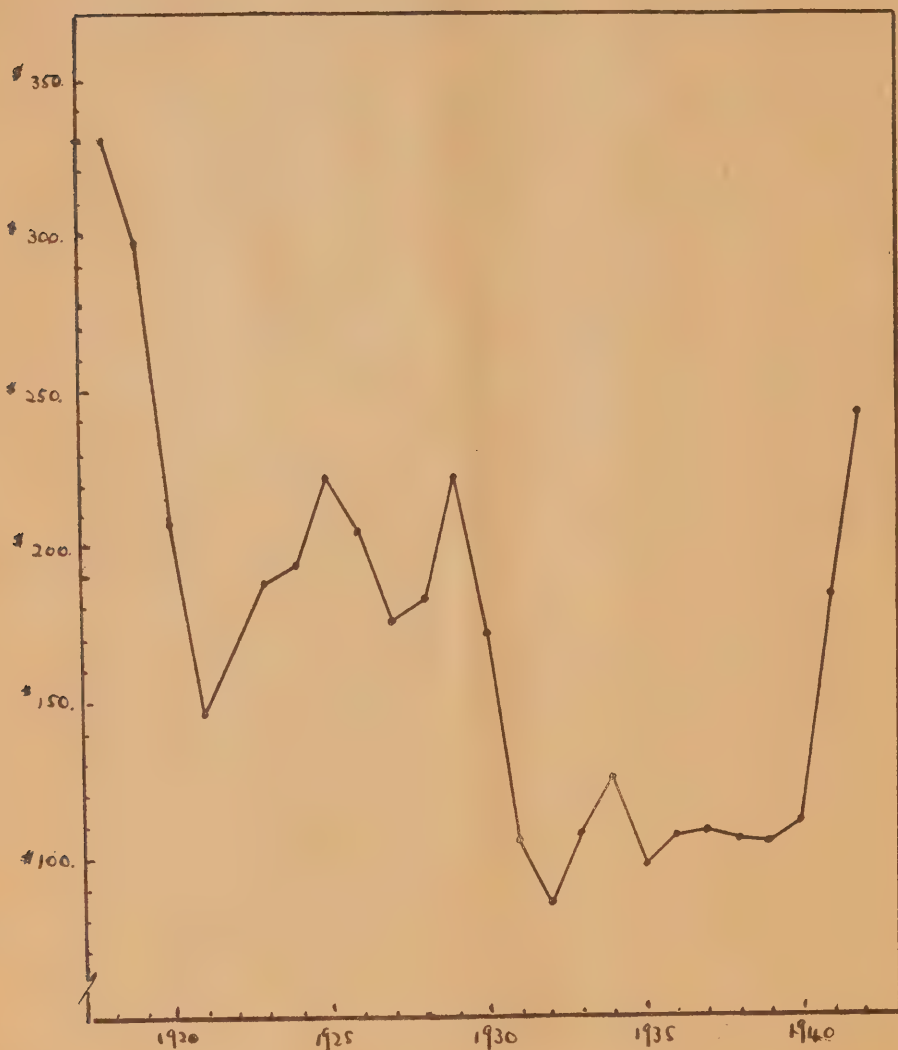
With the beginning of the present century, the iron rules of the companies have been so hard that there was a revolution on the Gaspé coast. Happily it did not spread nor was it very serious, but it has borne to our knowledge a funny state of affairs in this very century of progress.

In the last thirty years, twice our fishermen got a fair income, but it is somewhat embarrassing to state when; it was during the first world war and it is during the present one. These are the only two instances where the fishermen got a decent income. The achievements of the first one more than trebled our fishermen's earnings, and those of the latter have not yet reached their summit, as the 1943 ceilings on the price of fishery products appear for many to be higher than last year. However one must not forget that it was and is war prosperity and as such has no character of permanence nor stability. In fact, besides these two high points and some years of very relative prosperity in the 1926-29 period, the yearly incomes from fishing have always been bottom low, the average standing around the \$150 mark. (Graph IV.)

## IV

## MARITIME FISHERIES

Fluctuations in average Quebec fishermen's Income in the last 25 years.  
1918-1942 inclusive



Nor was this sorry income the exclusive lot of Quebec fishermen. For the year 1933, here are figures for the whole Atlantic shore, drawn from the Price Spreads Commission report (pages 184-185):

In that year, earnings of the average fisherman on the Atlantic shore ran from \$75 to \$400 for the whole season, according to districts. Here are some figures for various points:

| <i>Fishing district</i>                  | <i>Average yearly earnings</i> |
|--|--------------------------------|
| Lunenburg, Nova Scotia.....              | \$300                          |
| Queens port, Nova Scotia.....            | 200                            |
| Cape Breton, Nova Scotia, not above..... | 100                            |
| Glace Bay, Nova Scotia.....              | 75                             |
| Miramichi, New Brunswick.....            | 300                            |
| Gloucester, New Brunswick.....           | 100                            |
| Grand River, Quebec.....                 | 280                            |
| Belle-Anse, Quebec.....                  | 200                            |

The average of the whole province of Quebec in this particular year is \$107. Of course these are averages and there were individual earnings above, a few even far above, these figures, but at the same time, there were many more under. In this group of below average earners, even if there were a certain number of part-time fishermen, there were altogether too many who had no other substantial means of living.

This is not the income yet. Out of these earnings the fisherman must pay the operating cost of fishing and the maintenance of his output. What is left after these expenses are deducted is his real income and out of it, as the report says, the fisherman must try to accomplish the impossible task of providing for his family and himself.

Individual controlled figures corroborate these averages. At Grand River, Quebec, in the year 1939, of a group of 16 fishermen, the highest season's earnings were \$335.50 and the lowest \$168, and, with fishing and maintenance expenses deducted (including depreciation), the net incomes were respectively highest \$167, lowest \$39.

*By Mr. MacNicol:*

Q. You would not pay any income tax on that?—A. I am sure he would not.

The CHAIRMAN: As I have to leave for a while I shall call on Mr. McNiven, the deputy chairman, to take the chair.

(Mr. McNiven, Deputy Chairman, assumes the chair.)

The WITNESS: Some do away with the whole thing by simply blaming the fishermen: idleness, shiftlessness, etc. etc...

"These low earnings," vindicate the report, "are in the vast majority of cases not due to any lack of industrious application to their work on the part of the fishermen, who work longer hours and endure more hardships than those in many other occupations; they are the result of unfavourable economic condition."

And what better denial can be offered than the activity on the maritime shores as soon as there are improvements in economic conditions. What of the present increase in production against a decrease of fishing hands?

#### THE RIGHT TO SOCIAL SECURITY

In all the programs of reconstruction that we have had the opportunity of reading, great emphasis is put on the necessity of insuring social security for the common labourers. And in order to reach such a goal, tremendous programs of public works, better housing schemes, state contributions in social insurance and protection, special programs for better nutrition, etc., take the

front pages. This interest in the lower classes' social welfare is the most becoming item in any reconstruction scheme. It is vital, as permanent peace cannot be achieved in a world of poverty for the many and riches for the few.

Are many aware however that until war prosperity began to be felt on the maritime shores, our fishermen have always been the lowest income class of our society?

Such a statement is harsh, but bare truth just the same. History will again easily prove it. Each time there was, either on the maritime shores or outside, a chance for employment at the low rate of unskilled labour thousands of fishermen—I am speaking of Quebec—gladly left their boats to rot ashore to jump at the opportunity. In many instances the periodical sudden drops, in the number of fishermen shown in statistics, find their full explanation in the report of the general economic activity of the corresponding years and areas. Here are samples taken at random:

1907-08—Drop in the number of fishermen, 1,000; construction of the first section of the Gaspé coast railway and of many wharves.

1911-14—Drop of 3,000 in the number of fishermen: construction of the second section of the Gaspé coast railway, erection and operation of a pulp and paper mill at Chandler, Gaspé County.

1919-26—Drop in the number of fishermen 3,000: call for labour outside the Gaspé coast and construction of the Perron boulevard around the Gaspé peninsula.

Over and above this and for the same reason, there has always been a steady abandonment of the trade of the father by the sons and a steady migration from the fishing shores, and this double desertion was so acute before the war that it drew anguished protests from the bishop of Gaspé, Mgr. Ross.

On the other hand, our fishermen have answered gallantly the call of the flag, the maritime shores, it has been said, having a very high percentage of voluntary enlistment and one single fishing community of the constituency of the member for Bonaventure contributing 65 soldiers in the army out of a rather small population. Those who stayed at home, with the same means of capture and against a decrease in fishing hands, have, as we have seen before, succeeded in increasing the output of this vital war production.

Both deserve more than a simple return to their pre-war hardships; in particular to those who risked their lives for a better world, we are bound in honour to offer more than they had before they enlisted. If any of the poorer classes of our society has a right to see such social evils corrected the fishing class has, and if any individual has a right to social security our fishermen have. They should be assured at least the measure of security the present war prosperity has achieved.

#### SOCIAL SECURITY IN THE FISHING INDUSTRY

In a general way, social security should be thus itemized:—

- (a) Freedom from want, or decent living.
- (b) Adequate protection against all risks,
- (c) Some leisure with recreational and cultural facilities.
- (d) Possibility of old age retirement.

Let us consider each item separately and apply it to fishermen.

##### (a) *Freedom from want*

For fishermen it does not mean the high standard of living of some of the upper classes but at least living conditions definitely above poverty. Are not the only poor those who ramble here and there begging in the open? A decent freedom of want means: good sized homes with usual necessities, comfortable clothing and plenty of well balanced food.

*(b) Adequate protection against risks*

As all our fishermen are individual producers, owners in full right of their boats and rigging, the first protection needed is against risk of damage and loss on his thus invested small capital. Then on account of the precarious state in which their dependants would be thrown, fishermen need individual protection against the following risks: death, accident, sickness and invalidity.

*(d) Recreational and cultural facilities*

Fishing is a dull occupation in particular when fish are scarce. The fisherman has a right at least to a minimum of recreational facilities. This is especially true of the younger population in fishing communities.

Such recreation both for old and young could be guided towards better culture through adult education. Radio programs and educational films would serve both recreational and educational purposes.

*(e) Provision for retirement in old age*

The fisherman has a right to it. After a hardy and risky life, it is reasonable that a few years be left in which he can rest and enjoy leisure. Let us settle the matter here and once for all. Through the federal provincial old age pension scheme, old fisher folks are cared for.

## WAYS AND MEANS

In an ideal social world the economic institutions of individual countries should be complete by themselves and their activities regulated to achieve security for all at a very small minimum of government intervention and contribution. They would reach such a goal by raising the income of the lower classes to a sufficiently high level and in turn such income would insure sufficient purchasing power for decent living conditions. It could even buy the many protections the lower classes so badly need, provided of course the institutions created for such purpose are not operated for profit but simply at cost. On the same terms it could provide also for recreational facilities and for retirement in old age.

However, in our country, we are far from an ideal social world and even with the increase of present war prosperity, not many fishermen's incomes could provide for all the aforesaid items of social security. The average is yet far below the minimum required. Thus if some kind of security has to be achieved after the war, it means state intervention and contributions in more than one field.

In some of these fields intervention and contributions shall have to be quite large at the beginning, but here the government should favour the creation of institutions which have a chance, with years, to become self supporting. Thus its contributions may be reduced by and by and the money spent, as previously stated, will not only see the fishermen through the crisis of post-war readjustment but prove a sound investment in permanent social security.

*(a) Fishing earnings and fishermen's income.*

If, as we have just seen above, the fishermen's earnings cannot buy whole social security, there is a minimum below which they should not go. It is to provide decent living conditions and maintenance of the fishing outfit. Setting here a definite figure is, however, something of a task. Nominal figures are always debatable and money income does not derive its value from figures but from the sum of consumption goods and services it can buy.

The fishermen themselves, however, are very reasonable in the matter and should bring no trouble in the settlement of this particular point. In 1934 many appeared before the Price Spreads Commission and would have been satisfied with seasonal earnings of \$600.

"Fishermen witnesses who appeared before us," the report says, page 185, "were most moderate in their views as to what constituted the income necessary to maintain their homes and replace their fishing gears. Most of the witnesses stated that if they could secure \$600 a year, they would be able to make a decent living. Surely, adds the report, this is not an unreasonable objective, nor is it too much to expect that any reform suggested within the industry, should have as its first purpose, the establishment of at least this standard of living for primary producers."

At the time, the cost of living index number was 95.7; it is now 118. Their initial \$600 would come to about \$750 by the present index number. This figure is certainly not excessive and would provide poorly for a family of ten or twelve. But on our shores, with the contribution of small farming and gardening and of lumbering in the winter months, the total income should at least reach the thousand dollar limit. This should not be the ultimate goal but it is quite a fair one in any post-war era of stabilization.

It is hard to have definite figures as to the size of the 1942 income of our fishermen. One thing is certain, and that is they are content and encouraged. The very first goal in any fisheries program is to keep them in their actual state of mind through the maintenance of a good price for fish. This is not such a task now since the 1943 ceilings appear to be higher even than those of 1942. But when the years of post-war prosperity are ended, to keep the prices up to or at least at a decent minimum shall require direct government action.

#### (b) *Maritime Credit*

Along these lines, some action or rather help will be needed to supply the money for big expenditures, e.g. new boat or engine, new sets of fishing gear. Although the above named income includes expenses for maintenance and replacement, the fishermen have, seldom, when needed, the cash on hand. This calls for some form of maritime credit. Such credit, we are proud to state, exists in Quebec. For the last two years Ottawa at times, through an arrangement between the local government and the popular banks provided this credit, and this year a bill is before the legislature providing for the creation of a permanent system of maritime credit along the lines of the already organized agricultural credit.

#### (c) *Protection*

In protection of investments nothing, absolutely nothing, is done so far. No insurance scheme whatever is in existence. It is doubtful that the stock companies would be much interested either in that kind of insurance, and at the price they would ask not many fishermen in normal times could afford to pay the premiums. In the lending arrangements with the popular banks, insurance on boats and rigging, upon which credit has been granted, is compulsory and the premium is paid by the government of Quebec. However the policy is a part of a guarantee in favour of the bank, not of the owner of the insured property, and it covers only the amount of indebtedness. Here again, to insure, adequate protection, the Government will have to step in. It has done it more than once in the past, and some of our late fall storms have cost the government of Quebec a pretty penny. Once and in one lump sum, in 1943, the Department of Fisheries of our province paid in indemnities more than \$100,000.

Protection against sickness, accident and invalidity is very rare, if it even exists; life insurance on behalf of dependants seldom is encountered. The borrower in the scheme of maritime credit above referred to has to carry life insurance but only to the amount of his indebtedness and in favour of the lender, not of the bereaved family, should he die.

Stock companies do not appear to be very eager to plow the fields nor could our fishermen with their normal income afford to pay the rates asked by stock companies. In this field again if social security is to be achieved, the state will have to step in again.

In the whole field of protection government has two lines of action:

A state insurance similar to,—*mutatis mutandis* of course,—that which has been established to provide for all retirement in old age; an independent institution in which individual contributions would be kept on a level with the paying capacities of fishermen. The government would have to contribute quite largely at first, and the institution could then carry on by its own means.

Both plans are equally good as to the security provided. The first one would cost more to the government but it could be put in operation in a shorter time and dispense adequate protection to all right from the start.

It would however be a constant burden on the state's shoulders while the second one has at least a chance to become, with years, a self-supporting permanent social institution.

#### (d) *Leisure*

At least not much has been done in the field of leisure,—a little sport in some communities, a movie hall in a very few others, transient and local artists' plays, that is about all. And with war cutting the supply of French films to almost nothing, and gas rationing prohibiting the trips of transient artists, the recreation thus dispensed is a thing of the past. Cultural facilities are provided through parochial libraries, study clubs, conferences, lectures, radio programs. Recreational facilities are rather spasmodic while cultural facilities are steady and can be dispensed to whomever wished. Better recreational and educational facilities are in order. The government cannot step in directly but the indirect help of the federal Department of Fisheries in particular, in the field of adult education, is very efficient in cultural facilities and deeply appreciated. In the field of leisure, government could also help in a very indirect way, through social institutions which would promote the creation of local organizations and help them in planning a suitable program of recreation.

### SOCIAL SECURITY AND DEMOBILIZATION

Before closing this chapter, there is one more point upon which it is vital to focus attention: the effect of demobilization on the program of social security.

For the remainder of the war and for the few years of post-war prosperity no hitch is to be expected, no handicap that cannot easily be removed. How long will this period last? No one knows, no one can foretell. After the other war, there was a full two-year recess between the cessation of hostilities and the pinch of the fisheries crisis. If there is a crisis this time again, it will be when on the world's markets for fish, the reorganization of the world's fishing fleets shall bring in their weight again.

So up to that very point, demobilized soldiers and war workers hailing from maritime shores can go back to fishing and will help to relieve the present scarcity of fish on world's markets. At the current prices their income cannot be fair and will bring a no less fair addition to the national purchasing power.

However, the gates should not be thrown open. If social justice claims that each and every fisherman has an individual right to a decent living and a minimum of security, economic justice, on the other hand, claims too that any particular industry should not be called upon to provide for a larger portion of the population than it can naturally afford. This is particularly

true of the fishing industry and these two principles are always basic. They shall be of vital importance in the pinch of post-war stabilization.

Demobilization and reintegration of war workers shall thus need constant and careful supervision and be pushed through to completion by gradual steps. If at least the actual income is to be assured and kept constant, each addition of demobilized soldiers and war workers shall have to be measured every time to the capacities of the industry. And when the danger line is near, when the saturation point comes close through the behavior of markets, it will be better to seek openings outside the fishing industry than to give it an overdose of fishing hands in a time of economic instability.

Otherwise we hate to consider what will happen. The whole scheme may be wrecked, the whole building collapse. With the added labour and additional number of families to provide for, the industry would crash, the fishing incomes come back again to pre-war low levels. Dole and direct relief will then have to step in and days as dark as in 1932 may come again.

In any domain, it costs always less to prevent than to cure, to build once for all a permanent structure than go by tryouts and have to rebuild from wreckage. Therefore it will prove better in the long run to keep, if necessary, some of the soldiers and war workers paid and otherwise occupied than to dump them on the shoulders of the fishing industry and crumble it with the additional weight.

As no one knows exactly what is going to happen, a safe preventive policy would be to investigate right now the possibilities of agriculture, land settlement, forestry and other industries to contribute a share in fishermen's income, or even to hold back a certain number of ex-fishermen from their pre-war occupation.

## CO-OPERATION AND RECONSTRUCTION

There exists to-day in the capitalistic economy an important fragment of planned economy which is too little known and the value of which seems to be underestimated: this is the co-operative movement.

These words of Albert Thomas, in the last report he submitted to the International Labour Conference and reproduced by Cooperative Informations, No. 4, 1943, are a most appropriate heading to the present chapter. In fact, planned economy is not a fad created during this war, along with other systems; co-operation is a scheme of planned economy more than a full century old. It is a gallant effort made by the poorer classes towards economic independence and social security. From figures digested by the co-operative section of the International Labour Office, there were, in 1936, 645,918 local societies engaged in commercial activities. They had a membership of 154,119,500, and an aggregate turnover of \$37,354,000,000. There were also 159,698 savings and loan banks, with 18,652,000 members and a turnover of \$36,367,000,000. There are no complete figures available as to mutual insurance and in the above mentioned are listed the locals only that are affiliated with a federation, which leaves out quite a large number of co-operative societies. In Quebec alone for instance there are as such close to 100 independent consumers' stores, 283 mutual insurance, and many rural telephone societies.

Therefore it may safely be said that throughout the world the aggregate number of co-operative societies reaches the million mark; the total membership is close to a quarter-billion and the turnover over one thousand billions of dollars.

Although in our country the development of co-operation has been handicapped through individualism and lack of unity in action, our country can be proud of its achievements. The following figures, drawn from the Canada Year Book 1942 (pp. 543-556), show that 50 per cent of the Canadian farmers

belong to co-operative societies, which handle 31 per cent of our agricultural production. These societies number 1,395; their turnover in 1941 was \$242,158,000, and their total assets \$145,659,000. In co-operative banking, same year, we have 1316 loan and savings banks. They group 238,463 members and their savings-loan turnover is close to \$33,000,000. Here may we state that in this particular latter field Quebec ranks first and by far in the whole Dominion of Canada. Our province has 50 per cent of the total number of societies, 62 per cent of the members, 53 per cent of the capital, 94 per cent of the savings, 86 per cent of the assets and 60 per cent of the loans to members.

There are also in Canada about 400 mutual insurance societies covering risks close to a thousand millions of dollars, 365 co-operative retail stores with a yearly turnover of four to five million dollars, 2,348 local telephone co-operatives with more than 100,000 members, and many other groups with varied activities, medical care, transportation, housing, hostelry, etc.

At last, there are 91 fishermen's co-operatives grouping 6,436 members only, yet with a yearly turnover of \$3,086,900.

### CO-OPERATION AND WELFARE

We are now in a changing economy, and war will not leave us where it found us. If social security is to be achieved, one of the essentials of economic reconstruction will be the substitution of welfare to wealth. This is one of the basic principles of co-operation along with the priority of consumption over production and the abolition of the present price-profit mechanism.

No wonder that in this area of planning for post-war reconstruction, the promoters of this system of planned economy, which has successfully stood the test of ages are putting it again in the limelight. It is discussed in memoirs and periodicals, put on study programmes and fought for by no small economic and social authorities. Here is as an example taken from Consumers' Cooperation, February, 1943, by E. R. Bowen, the secretary of the Co-operative League of America:—

Co-operation is the only way to distribute abundance. We must produce an abundance of civilian goods after the war is over. But first we must organize ourselves so that they can be distributed and consumed. That is why we must adopt co-operation.

Recent studies have shown that the principal difficulty was in distribution—not production—that excess savings were piling up in the hands of the few, which should have gone into the hands of many in purchasing power, and were damming up the stream of distribution.

Co-operation breaks the bottleneck between the production of plenty and the distribution of plenty to all. It reduces the prices to consumers, to cost of production and distribution. It raises the pay of the producer—farmer, worker, and professional—so that there are no excess savings between the pay to producers and the price to consumers. Co-operation results in a just price to every consumer and a just wage to every producer.

The democratic Scandinavian countries have proven that co-operation reduces prices to consumers and raises pay to the producers and distributes purchasing power widely among the people.

This statement of principles is quite radical but at least it gives us a fair idea of the clash in the United States between profits and welfare as to leadership of post-war economy. There will always be a place for private enterprise and individual initiative, but in some fields, in the fishing industry for instance, it has to be reduced to a minimum; for so far it has completely failed to secure for our fishermen a decent income and to keep them contented and satisfied.

Even if it was conceded that in economic and social justice no form of enterprise is intrinsically bad and that they consequently have an equal right to expand and develop, it must be admitted also that in depression and stabilization periods they are not, however, equally efficient nor interested in the primary production field. Profit in itself is not immoral and private enterprises are entitled to pursue it, in a reasonable measure at least, when it derives from invention, skill or simplifications of manufacturing processes. But, if it ends in hard times the profit is reaped through cutting a more or less deep slice in the already meagre earnings of a class of primary producers. Then it is time to draw a line and see if there are forms of enterprises in a position to render the same services at lower cost to our fishermen.

Private concerns have no huge opposition to that either. In depressions, they do not compete in a very hard way for fisheries and fishermen's business. The fishing industry has never been for capital such a big paying proposition either, even in normal times. And so far a rather large portion of the capital of our Canadian fishing companies is of the "family" type. There appears to be only one of them with shares on the market. At least that was so before the war, and then, this particular one has made no big splash on the stock exchange.

In pre-war reconstruction, in Quebec fisheries at least, individual enterprises and small family companies played a large part in the development of our fresh fish business, risking gallantly, and losing even, no less gallantly, some of their capital gains and labour. Their devotion is worth public recognition. But whatever their ultimate motive was, it does not alter the fact that profit was their essential motive, their big incentive. And if stock companies choose to shoulder the burden of seeing an industry through a crisis or a period of readjustment, in the long run, it does not alter this other fact that they are not bound to do it, that nobody could blame them for not doing it and that when they choose to do it, it is from expecting their profit just the same.

Although co-operation in an economic system complete in itself and in a position to serve in times of prosperity as well as depression it is in the pinch of depression through the hardship of reconstruction that it can give its full contribution to the social welfare of the poorer classes. Co-operative societies accomplish their economic functions at cost, not for profit. Therefore in the production field they are in a position to return to the fisherman a larger share of the dollar paid by the consumer for his fishery products. It may be a few cents only, but in hard times they are worth dollars; then the fisherman's dollar in turn can buy more at the co-operative store than anywhere else. This same dollar can buy more services and more protection, and at last at the co-operative banks it usually draws higher interest while on the saving side of the ledger, and can be borrowed at lower rate while on the loaning side of it.

#### POSITOS OF SPAIN

That co-operation could perform such services on behalf of fishermen in the post-war era, that if given proper facilities, it could buy them the much-needed social security they deserve, is well demonstrated by what it had already done before the war for the fishermen of Spain. Here is what can be read in one of the special reports of Co-operative Information:—

The positos of Spain had in 1934, 400 locals, 50,000 members. They owned 116 various buildings and operated 53 large fishing crafts. They owned co-operative stores, co-operative fish markets and sales organizations, co-operative savings and loan banks, mutual insurances. In 1934, they had 118 schools of their own where 9,440 children and 4,720 adult fishermen were taught general culture, mutuality and co-operation.

A particular case might give a better idea of the achievements of positos. There is one in the fishing port of La Selva. It has brought a decisive improvement in the habits and social condition of its members

and of the whole community. It owns a co-operative store, takes care of the sales of fish, has organized mutual assistance in many fields of activity. It has its own insurance against loss of life and disability, its system of pension to provide retirement in old age. The "posito" even proposes to acquire the local theatre, the pub and the recreation centre of the town. And thus a group of poor fishermen who lived miserably before, under the rule of too many middlemen, are now controlling the economic and social activities of their community.

### CO-OPERATION AND QUEBEC FISHERMEN

Co-operation among fishermen on the Atlantic shore is of quite recent creation and the actual movement does not date far back in the pre-war era.

However the latest figures at hand (Canada Year Book, 1942, pp. 453-556, supplemented by personal files), show that in 1941 and in the production field only there are close to 77 societies federated in two big unions: Maritime United Fishermen, Halifax, N.S., for Nova Scotia, New Brunswick and Prince Edward Island, and for our province, the Quebec United Fishermen, Gaspé and Montreal, of which much more shall be said later. In the co-operative loans and saving fields, there are no exact figures as to the share of the Atlantic fishermen. However in the above named provinces, there were 993 local societies out of a total of 1316 for the whole Dominion of Canada, or a little above 75 per cent. Co-operative stores number about 160 in the same area, close to 50 per cent of the estimated total for the whole of Canada.

These are remarkable achievements and Quebec cuts quite a share in these totals. Over and above the development in production which will rate the whole next chapter, co-operation in our province has entered the fields of loan and saving and of the retail trade.

In the former our "Caisses Populaires" all hail from the first co-operative bank, organized by the late Commandeur Desjardins at Lévis near Quebec in the year 1900. The first one on our maritime shores dates back to 1913 and was founded at Bonaventure, a fair sized community of farmers and fishermen and from which hails the present member for the constituency of the same name. On the Gaspé coast in 1941, out of a total of 55 parishes, 37 had their popular banks, or 67 per cent, and out of about 12,000 heads of families 5,000 were members of their local societies, or 40 per cent. The Gaspé coast fishermen and farmers are not rich; however their yearly aggregate deposits were close to half a million dollars. There are two co-operative banks on the north shore of the St. Lawrence and four on the Magdalen Islands.

Popular co-operative banks can be and propose to be instrumental in reconstruction. To this end they encourage saving in order to accumulate reserves for any post-war emergency. Meanwhile they do not miss any occasion to encourage production. Thus, in 1940, they have supplied loans to fishermen who wanted to rig up for fishing. So far 600 Gaspé coast fishermen availed themselves of these facilities and the aggregate loans amount to \$52,598.

Although the first co-operative retail stores on our maritime shores date back to 1939 only, there are now nine societies operating eleven stores; five others are on their way. This form of co-operative enterprise is a powerful instrument in fighting out a business depression by stretching farther the purchasing power of the dollar of the poorer classes.

In reconstruction it is no mean advantage. Moreover they are a natural barrier against excessive high prices and exploitation of consumers. As they are run on a cost basis they naturally seek and charge the just price only and have no interest in raising prices to scarcity levels, to make profits at the expense of the poor.

The consumers co-operative organization can reach farther. One of the main contributions to social welfare will be improved nutrition, a more balanced

diet for all and in particular for our fishermen. To this end, our co-operative stores, part of a federated national scheme, could not only carry the popular education which must accompany the necessary changes in diet but by cheap distribution costs make the necessary imported foodstuffs of good quality accessible to the fishermen's income.

The whole field of protection has not been touched yet by co-operation. There is no form of mutual insurance yet on boats and rigging, on the life of fishermen, against sickness, accident or invalidity. Special co-operative institutions could cover the whole field but it would require quite a contribution from the state in the very beginning. However, they are the very institutions that have a fair chance to become self-supporting with years.

Our federal and provincial governments, we are proud to state, have shown a special attention to the co-operative movement among fishermen, contributing, the former the moneys needed for the expansion of adult education, the latter through grants, guarantee on loans, etc. This is a wise policy, worthy of special public recognition.

### THE QUEBEC UNITED FISHERMEN

In 1923, just at the outset of world war No. 1 reconstruction, the fishermen of the Gaspé coast gave a first try-out to production co-operation. Some ten or twelve societies were organized with the help of the provincial government and under the patronage of the bishop of Gaspé. The sales of fish were handled through the Quebec Federated Co-operative while the purchases of fishing rigging, fuel and oil and even groceries and provisions were done in open market.

These associations made quite a fine start. Two years after their creation, their aggregate turnover was close to a quarter of a million dollars. But they faded out of the picture one by one and a single one has survived: lack of co-operative pre-education, incompetent management and store credit accounted for their failure.

This painful experiment left something in the people better than the bitter taste of failure. Adversity is a hard but profitable school. In 1938, the fishermen of the Gaspé coast were ready to begin again, this time with the same patrons; the bishop of Gaspé and the government and with the school of fisheries in charge of pre-education and organization. No co-operatives were launched in 1938 but in the spring of 1939 four were ready. They were federated right away and the sales of fishery products centralized through the new federation, a very wise policy in order to stop any competition and price cutting between the local societies on common markets.

### ACHIEVEMENTS

The organization is now four years old. It is already the biggest shipper of fresh and frozen fish of the whole province of Quebec and the second best in pickled and dry fish, bowing only in this line to the old firm of Robin Jones and Whitman Ltd., a concern operating on the Gaspé coast since 1766. In 1942, the Quebec United Fishermen Society has handled 59.8 per cent or close to three-fifths of the whole Quebec fresh and frozen fillets trade.

#### (a) Statistics

Figures are rather tiresome; here they are eloquent and can hardly be dispensed with.

#### I—ORGANIZATION

| <i>Year</i> | <i>Affiliated co-operatives</i> | <i>Membership</i> |
|-------------|---------------------------------|-------------------|
| 1939 .....  | 8                               | 1503              |
| 1940 .....  | 11                              | 1681              |
| 1941 .....  | 14                              | 1936              |
| 1942 .....  | 14                              | 1993              |

One would wonder at the slack of the two last years as to locals and members. The organization covers already nearly all the good fishing centres of the Gaspé coast. Moreover fishermen cannot join at will, but only when pre-education is fairly advanced and when the expected business turnover justifies the organization of a society. However, three new ones are on the program for the 1943 season.

## II—BUSINESS

| Year       | Fish<br>handlings<br>pounds | Fish sales<br>\$ | Fishermen's<br>supplies<br>purchases \$ | Total<br>turnover<br>\$ |
|------------|-----------------------------|------------------|---|-------------------------|
| 1939 ..... | 6,480,590                   | 164,945 27       | 22,300 00                               | 187,245 27              |
| 1940 ..... | 6,559,171                   | 227,081 58       | 23,047 25                               | 250,128 83              |
| 1941 ..... | 8,823,101                   | 412,158 09       | 29,050 00                               | 441,208 59              |
| 1942 ..... | 13,042,236                  | 614,406 74       | 31,835 40                               | 646,242 14              |

The production of 1942 in finished products shipped to markets is a little above 5,000,000 pounds, fillets coming first with 2½ million pounds, dry codfish second 7,500 cases, pickled fish 5,350 quintals. This is not so much in regard to the total production of the province, but quite an accomplishment under the circumstances and in such a short while.

### (b) *Modus operandi.*

From the very beginning, Quebec United Fishermen has paid cash money for fish, a practice that came as a contrast with the policies followed by the old companies and many individual enterprises of exchange of fish for goods from their stores. As the fish is sold, sometimes months after it is taken, the federation has not enough capital and reserves to advance the money out of its own funds. It borrows from the banks on its own assets and partly on the Quebec government guarantee. All through the season the federation advances the locals and the latter pay their fishermen. When fish is sold and paid for, the federation collects its advances to locals and repays the bank loan. Needless to say, the government has never been called upon to pay a single cent on account of its guarantee. The loans are often repaid many times in full before they come due at the bank.

To insure a better quality and uniformity in the products offered to the consumers, the federation is vested with full authority in production matters. It has the right to correct any mistake or defect in the shops of the locals, and a director in charge of production visits them as often as possible, trains the new locals and sees that the quality is kept everywhere at the highest level. A result of this is that the trade marks of the Federation "Corvette" and "Blue Cold" are well known and rate as a symbol of quality on Canadian and American markets.

### (c) *Montreal branch.*

In the spring of 1942, the federation took a decisive step towards easier marketing of its fishery products. Up to that time, fish was sold through brokers on the Montreal, Toronto and U.S. markets. In 1942, the Quebec United Fishermen decided to have their own sales agency, and chose Montreal as a central distributing point. They bought and modernized a cold storage plant on Boulevard St. Laurent north, engaged a staff and launched right into operations. Here again the Quebec government lent a hand. For such a capital investment, a loan was secured from the federation of the co-operative banks and the government of Quebec supplied the guarantee.

Success has crowned the efforts of Quebec United Fishermen. After one short season of operations, the Montreal branch not only pays for itself but has refunded two instalments in one on its long term loan.

(d) *Patronage dividends.*

Here is another achievement to be justly proud of. When the Quebec United Fishermen came into the picture, in 1939, the price of fish to fishermen was rather low. In the salt fish trade, it came to about 75 cents per hundredweight and in former years we have personally seen prices of 50 cents for small codfish, fillet size, which could no longer find a market as hard cured dry fish. The minimum price of \$1 per quintal for all codfish was then set, such being considered a bottom below which fishing was not worth being carried on.

At the end of the season however, over expenses and provision for reserves, enough money was left to pay \$12,539.98 in patronage dividends. In 1940 market conditions improved and kept on in 1942. The independent buyers raised their price. Quebec United Fishermen took a gamble. It gave as advance payment the full price paid by competitors. Nevertheless at the close of the 1940 season, it paid \$28,602.56 in patronage dividends and in 1941, \$59,648.10. At the beginning of 1942, the price of codfish opened at \$2 per hundredweight and gradually increased to \$4 towards the end of the season, averaging \$2.92. Quebec United Fishermen closed their books with a patronage dividend of \$175,353.56.

Of course such patronage dividends as in 1942 are definitely above the normal rate: \$1.75 for every \$6 worth of transactions or 29 per cent. This is quite misleading for the uninitiated and I had better give a short explanation here and now.

In a private company dividends are declared after all appropriations for reserves under various headings are taken out of the profits and all such appropriations become at once the common property of the company.

In a co-operative, a small amount of the benefits is set to statutory reserves, which are indivisible and form a kind of collective wealth passing through from generation to generation of co-operators. The remaining part belongs to the members and they share it according to the amount of their individual turnover. They do not get it in full cash however: the society needs capital or revolving funds, and for the accumulation of these it holds back a certain percentage of the net profits.

But such an amount never becomes the common property of the society. It is credited to each member in the books, becomes an investment bearing interest and is paid back in full should the fisherman have to leave the society. The remainder only is paid in cash. This year this cash patronage dividend averaged \$90 per fisherman, which is more than the average whole return for six months fishing they got in 1932, namely \$85.74.

(e) *Proposed expansion.*

All these achievements in organization, production, quality, turnover and patronage dividends are the work of a group of fishermen, the sons of those who, in the nineteenth century and in the beginning of the twentieth, lived in a condition of half slavery in the hands of the old fishing companies and who, in the pre-organization period, were themselves a poor lot, bewildered by the depression and disheartened by dole and direct relief subjection. But this is a first step only.

So far, Quebec United Fishermen has confined its work in its cradle fishing district, the Gaspé coast. However it is the policy of its leaders to expand. On the Gaspé shores, new syndicates are now organizing. The fisheries of the Magdalen islands are reverting to the provincial administration. There are already nine syndicates there and it is expected that they will want to join our central organization. The river St. Lawrence fishermen have already two local societies in full swing and a third one is soon coming into the picture. The north shore of the St. Lawrence has nothing to offer yet but co-operative education is under way there too. Materializations are expected in due time.

Such a consolidation cannot be completed in any one year as it brings in many problems: sufficient trained personnel, finance and capital, outlets for the increased production. However we hope the bigger part of the program will be put through during the 1943 season.

When it comes to discussing fishermen's incomes and social institutions able to provide some kind of social security to fishermen, co-operative institutions can be instrumental. By their constitution, by their methods of operation, they aim to give to the fishermen the market price of the fish less selling expenses. Consumer co-operatives aim to stretch the buying power of the fisherman's dollar. Even if it is not very much it is something started, and they buy protection, insurance against risk of a lower price than the current price.

We have made a trial of co-operation among fishermen of the Gaspé coast. I am not going to go through all the accomplishments, but it is vital that we at least have an idea of what co-operation can do for our fishermen in reconstruction. In 1923 we started production co-operation on the Gaspé coast and the venture failed. After three or four years one by one the co-operative societies withdrew from the trade; but in 1938 the fishermen came in again and this time they did succeed, or at least have succeeded so far. They have their own co-operative institution, called the Quebec United Fishermen, which is a small turnover measured by mass production standards, but it is a big turnover measured by fisherman production standards. Quebec United Fishermen has a turnover this year of \$750,000 for fish only.

*By Mr. Gillis:*

Q. Would you mind elaborating a little further on some of the reasons why you failed in the field of co-operation in 1923?—A. If you will allow me, I shall give it to you in three short sentences: lack of co-operative pre-education; incompetency of managers, and a wrong way of doing business; mixing consumption and production in the same organization.

Q. Basically the cause was lack of education?—A. Yes, lack of pre-education.

*By Mr. Castleden:*

Q. Would you mind another question? Can you give us an idea of the price the fisherman was getting for his commodity on the wharf, and what price that commodity was being sold for on the markets in Montreal, I am talking about the spread between the two?—A. I can give you the spread, the spread is awfully high. Let us take what happened during the depression years. Fish sold at that time at one cent a pound.

Q. What kind of fish?—A. In Quebec 90 per cent is codfish. The price the fisherman received was one cent. It takes two pounds of fish to make one pound of fillets and the lowest price for fillets was two pounds for 25 cents.

Q. On the Montreal market?—A. On the Montreal retail market. At that time we were glad to sell fillets at 5 cents a pound f.o.b. shipping point which is the lowest price recorded in history.

Q. Has the co-operative been able to return very much more than this 12½ cents? He still sells at 12½ cents?—A. No, the co-operative has returned a far higher price and have given a far higher return to the fisherman.

Q. Does the co-operative go into the retail business at all?—A. No.

Q. You have not got consumer co-operatives?—A. No; we have gone into the distributing field by having our own distributing branch office in Montreal with a cold storage plant.

Q. Who was purchasing the fish at one cent a pound?—A. At that time it was a small individual; that was before the co-operative came in.

Q. Now you say you sell to your branch in Montreal?—A. Yes.

*By Mr. Matthews:*

Q. Two cents per pound?—A. One cent per pound landed weight. It takes two pounds of the raw material to make one pound of fillets.

*By Mr. Castleden:*

Q. Which sells at 12½ cents?—A. Which sold at 12½ cents at that time.

Q. You do not know whether the distributor was paying income tax or not?—A. No, I do not. I shall now come to the Quebec United Fishermen.

Mr. JEAN: Mr. Chairman, this is a very long brief and there are some very interesting points in it which the witness is obliged to pass over because of the element of time and I wonder whether the brief could not be printed in our report.

The DEPUTY CHAIRMAN: I understand that arrangements were made by the chairman at the opening of the meeting that the brief would be filed and that certain portions would be brought before the committee so that questions could be directed to Mr. Berube, and that the complete brief would be incorporated in the record.

### QUEBEC UNITED FISHERMEN AND RECONSTRUCTION

The WITNESS: At the present time Quebec United Fishermen is already in a position to give a hand in reconstruction. Its marketing costs and services are kept at lowest possible figures, which naturally bring the fishing returns to the maximum. Moreover, Government moneys, through its channel, are passed along directly to the fishermen or spent in their complete and direct benefit. Thus in the pinch of a crisis, through the co-operative, more fishermen can be kept at fishing and yet get a decent income.

Thus as things are now, Quebec United Fishermen is ready to accept and shall welcome in its ranks any reasonable number of soldiers and war workers hailing from our maritime shores. It is understood, of course, that they will come in good faith to the locals and are open to adult education. In the pursuance of such a policy, there would be only one limitation; it would not come from the association itself, but from the behaviour of markets.

If we are heading for an economic collapse again after this war, no better than any other form of enterprise could Quebec United Fishermen weather the storm. Of course through the organization, the fishermen could yet receive a better service for the same cost, but enlistment in the society would only increase the sorry plight of members.

#### *By-products expansion program*

At the beginning of its operation, Quebec United Fishermen had to enter in and control the current lines of fishery products manufactured by its local associations. It had to see to the organization of new branches at vital points on the shores. In both fields now things are well under way and future expansion, through the momentum already gained, can take care of itself with a minimum of care.

With a view to create employment in the post-war era, the co-operative contemplates entering the fishery by-product industry. It is not a new industry in the province of Quebec. From the early times down, Canadian and foreign fishing ships came in numbers in our waters to load up the much prized cargoes of salt fish and whale, seal, fish oils. The discovery of petroleum gave the oil industry a hard but not fatal blow, new uses being found. Their medicinal and nutritive value discovered, the fish oils took the lead again.

But other countries forged ahead. Newfoundland and Norway in particular, produced quantity and invaded our own markets. At the time there were no refineries on the littoral and our small production, of crude oil only, was shipped to United States and sold on the American market, or even resold to

our drug manufactures. The first modern plant on the maritime shores of Quebec was erected at Fox river in 1937 or 1938; there are now four. As far as cod liver oil is concerned, at least, we are proud to state, that things are well under way but in the field of fish oils (oils extracted from the flesh of fat fishes) our oil industry has barely accomplished anything yet. Meanwhile the fish meal industry has begun and progressed, although on a rather small scale. Not so long ago, all the raw material available was either dumped back into the sea or used for manure in the fields, let alone the portion rotting on beaches and wharves to the great discomfort of neighbours and tourists. First a concentrated fertilizer was manufactured but the value of this rich source of proteins and minerals was soon discovered and from the use of fresher raw materials, derived the present fish meal industry.

Here again Quebec stood behind, and for feeding our cattle and poultry, we imported our fish meals from outside. However, in the very last years before the beginning of the war fish meal plants were started in connection with the oil plants already in operation.

*By Mr. Matthews:*

Q. How long have you been utilizing the by-products?—A. Oh, in Quebec we have been utilizing the by-products for quite a while. Do you mean utilizing them on the farms or in the fishing industries?

Q. Well, for such things as the development of fish oils?—A. That is the oldest industry in Quebec. It goes back to the days of French domination when they went out for whale to make fish oil and used it as we used coal oil in Canada fifty years ago.

Q. Are those by-products suitable for the manufacture of fertilizers for farms?—A. I am going to give you my opinion frankly. I was rather young at this time—it was quite a while ago—and we used to make fertilizers out of fish by-products with the cheaper grades. The other raw material is a better proposition than the fish meal.

Mr. HILL: The fish meal is worth three times as much as the fertilizer.

The WITNESS: Yes, that is right.

The DEPUTY CHAIRMAN: What do you use the fish meal for?

The WITNESS: It is used for the balanced needs of cattle, horses and even poultry.

*By Mr. Castleden:*

Q. Are they doing anything in the way of making liver oils?—A. Oh, yes, we are doing well with the livers. We have four manufacturing plants. We take from our livers practically all that can be taken in that regard, but it is the fish oil field that has not been expanded.

Q. Is there anything in the co-operative matter?—A. Not yet, but it is on the program.

Q. Do they purchase the livers from the fishermen?—A. Yes. It is not on a co-operative basis, but the co-operative has an agreement with an independent producer. The price of livers is fixed for the season at the beginning or at the top market price, and the livers are sold to a private enterprise.

#### *Sources of Raw Materials.*

The non-edible portions of our commercial fishes, cheap varieties of edible fishes and coarse fishes are the three main sources of raw materials for the industry. In Quebec there is a sufficient amount from these three to justify the organization of production of fish meal on quite a large scale. The catch of codfish in 1942 has been 54,000,000 pounds. It represents at least 21,000,000 pounds of offal, roughly 10,000 tons. If all manufactured, this is 2,300 tons of fish meal.

Herring, in the cheap fish group, is the most important. It is plentiful not only on our maritime shores but up the St. Lawrence river as far as Ste. Anne

de la Pocatiere, a bare seventy miles below Quebec city. In 1942, the official figure for the total catch is 38,000,000 pounds, 19,000 tons. This is certainly below the actual harvest and such figures cannot serve as a yardstick of the possible contribution of this particular fish to a by-product industry. In fact who can tell the tremendous quantities used everywhere every year as manure in the fields? For miles and miles along the shores and up rivers, we have personally seen more than once hundreds of tons waiting there for such use. Moreover, more modern methods of capture could double and treble the actual yield. Nor should we fear depletion for this fish for centuries has defied the combined destructive forces of nature and man.

Apart from its present contribution to the fresh and pickled fish industry and its uses as bait, herring could as in other maritime provinces, British Columbia in particular, supply a canned product—herring in tomato sauce—a vital food of which our province has not, to our knowledge at least, contributed a single case to alleviate the food shortage in England. And its contribution to the by-product industry could yet be same 10,000 to 12,000 tons of raw material, a possible output of a hundred thousand gallons of oil and two thousand tons of fish meal.

As there are no figures available now on the catch of coarse fishes, let us leave for the present their possible contribution to the by-product industry.

### *The Quebec Problem.*

From the two first sources of raw materials, it is nevertheless estimated that the fisheries of the province of Quebec could for a start produce some 6,000 to 7,000 tons of fish meal, a minimum of 100,000 gallons of oil, and the chances are that such output could be doubled when the industry shall be in full swing. By the 1942 statistics, they have produced only 330 tons of fish meal and 3,183 gallons of fish oils, a bare \$25,000.00 value when from herring only British Columbia in 1940 has drawn 1,700,000 gallons of oil and 24,264 tons of fish meal and thus increase the money output of its fisheries by one \$1,500,000.

No blame, for the past at least, should however be put on Quebec. Lack of capital and the dispersion of raw material all over the territory worked against the expansion of the industry. In the pre-war era and with the low market prices prevailing then these were serious handicaps and the spasmodic ventures of the time all failed not on account of business inability but of a too high cost of production caused by the cost of concentration of raw material.

### *The Quebec United Fishermen Project.*

War prosperity and market prices have removed the latter handicap. Fish meal can be produced at profit even against the cost of collecting raw material to a central manufacturing plant. There is an acute shortage of fish meal and fish oils on the market and as Quebec was never able to supply its own consumption, even in the pinch of an after war crisis, Quebec United Fishermen can rely on the home market for its total production.

Moreover the development of the industry will open many new jobs in the plants as well as in fishing. In this latter field, so far the prices to fishermen for raw materials appear to be low but through the co-operative plan, they would be raised to the maximum. In fact, the fishermen shall receive the whole market value of the finished product, less of course manufacturing and administration costs. And if patronage dividends in this section are on the level with the other departments of Quebec United Fishermen, they will no doubt assure a decent income to those employed in securing the raw material over the whole season.

At least, oil and meal are only two products of the fishery by-product industry; there are many others and science discovers new ones by and by. Fish glues, bates, isinglass, gelatins are already produced, special oils of potent values are extracted from the viscerae of certain Pacific Coast fishes that are

worth \$30 to \$75 per gallon. Our possibilities in this field have not been inventoried yet but Quebec United Fishermen stands on its toes ready to grasp every opportunity to add to the wealth from the sea and to create new jobs for demobilized soldiers and war workers.

However, the second handicap, lack of sufficient capital lies yet in the path. Surely under the circumstances, there is a way out, and in war prosperity with government help, capital can be found and supplied for such a vital industry.

At the present time, the United States is planning an increase in their fisheries production for five years ahead, 193-47 inclusive (see *Fishery Market News*, March, 1943). If capital, the only actual handicap, is made available to Quebec United Fishermen for their by-product program, no doubt our production of oils and meals shall soar ahead before 1947. There is no doubt either that, by that year, the industry in the province of Quebec will have given a fair contribution to alleviate the present shortage not to mention employment for demobilized soldiers and war workers.

## VI

### THE SCHOOL OF FISHERIES AND SOCIAL-ECONOMIC SERVICE

Before discussing further any reconstruction scheme and in particular coming to what share the School of Fisheries and its extension service can take in the program, a short description of both institutions appears to be rightly in order.

#### THE SCHOOL

While the pre-war reconstruction in the Quebec fisheries painfully forged ahead, the leaders of the work felt soon that there was a missing link in the organization, the lack of a scientific institution with a practical course of engineering. Of course, the fisheries stations supplies research in handling reconstruction problems and their contributions were, and are yet, precious to the industry. But this is only one part of the scheme; training personnel is as important, and no institution existing at the time was in a position nor had a program to train the type of engineer needed by the industry.

Thus, in 1938, the School of Fisheries was organized and located at Ste. Anne de la Pocatiere in connection with the School of Agriculture, because the similarity of program, housing and laboratory facilities were equalled nowhere else.

#### *Courses.*

At Ste. Anne teaching is given at three different academic levels: regular or engineering course, able fishermen or intermediary, and youth's training or special course.

The first or regular course is opened to graduates (B.A.) of our classical colleges or to students of other institutions with equivalent credits. Its curriculum is of four complete academic years plus three practical summer sessions in fishing centres. On the program are basic sciences (chemistry, physics, mathematics, biology, zoology, economics) and applied sciences (economic ichthyology, oceanography, navigation, fishing, technology of fishery products, fisheries production organization and scientific management, philosophy of co-operation and administration of co-operative organizations).

In planning this course, the school has made hers that rough but very clear definition of an engineer given by Dunn, the co-ordinator of production of the Roosevelt administration. "A real engineer", says he, "is a man who can do for one dollar what any fool can do for two."

The first class graduated in the spring of 1942. Out of ten, two stayed at the school to take post graduate work, two were engaged by fishing concerns and

the six others are working as instructors in fisheries technology and production for the government of the province of Quebec.

The able fishermen's course is under way but not yet completely organized. It appeals to practical young men in the fishing industry who want a better training in their trade. It will be of one full academic year. The program in short shall include elements of basic sciences, navigation and fishing, fisheries technology and economics, co-operative organizations.

In co-operation with the Youth Training Department of Quebec and to fulfill the youth's training program of both the Ottawa and Quebec governments, the school organized in the fall of 1938, a special course for young fishermen. It lasts six weeks. Navigation and fishing, fisheries technology and co-operation are the main items on the program. So far 175 young fishermen have availed themselves of the facilities offered through these special courses. Many of them are prominent in local fishing activities, some even already managers of their co-operative societies.

### *Research and teaching staff*

Through budget limitations, the School has been unable to procure a fully independent and complete research and teaching staff. Nor was it a necessity. However here are some of its permanent professors:

Major M. A. Pineau, doctor of science of the University of France: professor of biochemistry and allied sciences.

Cdant Lucien Beauge, graduated of the Marine Academy of France, veteran of World War I rst and for 18 years in charge of oceanographic research for the Office of Maritime Fisheries of his mother country: oceanography, navigation and fishing.

Ernest F. Thompson, doctor of sciences of Cambridge University, England, formerly in charge of hydrobiological research for the Royal Society of England in Atlantic and Indian oceans: hydrobiology and ichthyology.

A. J. Boudreau, formerly of the Extension Service of Antigonish University, general secretary of Quebec United Fishermen: Co-operative theory and practice.

The least, the writer of this report, graduate of the College of Fisheries of the State of Washington University and post graduate at the Mass. Institute of Technology: production and economics of Fisheries.

As regards basic science, chemistry, physics, biology, zoology and economics, for instance, the students in fisheries follow the courses along with the students in agriculture. Thus the school enjoys the services of many competent professors of the faculty of agriculture.

At last, owing to its good relations, the school can and has secured on part time basis the services of many outstanding authorities in the scientific world. May we present a few:

Dr. D. K. Tressler, formerly professor at the graduate School of Cornell University and head of the department of Chemistry at the Central Experimental Station of Geneva N.Y. Dr. Tressler is author or co-author of many books of which Marine Products of Commerce (a text book for our students) and the Freezing of Meat, Fish, Fruits and Vegetables are outstanding.

Norman Jarvis, a M.Sc. graduate of the School of Fisheries of Seattle, State of Washington University. Mr. Jarvis is at the present time Associate Technologist for the Bureau of Fisheries of the U.S. Government at Washington, D.C. He has worked in the reorganization of the fisheries of Central and South America.

Finally Dr. W. W. Johnston, formerly of the Fisheries Experimental Station at Halifax, N.S.

The research has been particularly active in the oceanographic and economic department. Cdant Beaugé has made three scientific summer cruises from which he has brought back not only specimens of the fauna but actual fishing maps of certain regions. Many of his findings have been embodied in his book published in 1941: "Manuel du Pêcheur" (Handbook of Fishing). Research on Economics of Fisheries have been carried by your humble servant. Many of his preliminary findings are embodied in his book published in 1941: "Coup d'Oeil sur les Pêcheries de Québec" (Outlook on Quebec Fisheries).

### THE SERVICE

A scientific institution which would limit its action to the turning out of yearly batches of graduates misses a good portion of its goal which is to transfer science to people for the betterment of social conditions. In accordance with such statement, the School of Fisheries a few months only after its own birth, organized its social-economic service.

This service is somewhat similar to the Extension Department of the university at Antigonish, Nova Scotia, and has the same tasks: spreading of adult education and social reform through co-operative economic activities. It has been organized on behalf of fishermen, but in spare time, when any, it gives a hand to farmers, land settlers and labourers who want to group their activities.

#### *Study Clubs*

To promote education among fishermen, the service uses any means of propaganda at its disposal, field days and conferences, meetings and lectures, radio programs and literature. So far 324 lectures, fourteen radio programs, four special courses have been given by the staff of the service, 48,700 bulletins and leaflets distributed.

However the main and most effective instruments for spreading adult education is the study club. The Service has organized 200 of them, a membership of 2,200; and these study clubs held in 1942 1,200 meetings. Each study club needs a leader. Our special courses of the Youth's Training program have taken care of this. While they are at the school, the students take a thorough practical training in study club leadership and back in their respective fishing communities many of them are prominent in adult education activities.

#### *Achievements*

The service is only four years old. It has a very small staff and has confined its activities to the Gaspé fishing district only. However here are some of the results achieved:

- (1) The organization of production co-operatives and of the federation Quebec United Fishermen, of which enough has already been said.
- (2) The organization of consumers' co-operation with nine societies operating eleven stores. A form of co-operative enterprise unknown so far on our fishing shores.
- (3) A new life injected in the expansion of co-operative popular banks. They numbered 19 before the Service began its work in co-operation with the district federation, in 1938; in 1941, they numbered 37 with a membership of 4,971. And new foundations are forthcoming.
- (4) At last, the Service has given a hand to fishermen engaged the same time in farming and forestry, helping them in the organization of agricultural and forestry co-operative activities.

## APPENDIX

Program of Public Works on the Maritime shores.

Very likely public or semi public works will be needed in fisheries to keep employment at a fair level. It will not be necessary to go out of our maritime shores to find suitable projects. Some even are very acutely needed.

May we suggest:—

*Improvement of communications facilities*

(1) *Railway*.—Straightening of curves, lowering of grades, replacement of rails and ties, rebuilding of bridges and trussels in order to permit heavy freight circulation as well as fast passengers and express service in the Gaspé-Campbellton area. Construction, if advisable, of a transgaspesian line through the central mining and forestry areas.

(2) *Water*.—Improvement of natural harbours with deep-water permanent wharf constructions, where needed.

(3) *Roads*.—Completion of a net of good roads, not only on maritime shores but in the interior of the Gaspé Peninsula and on the north shore of the St. Lawrence, for protection of forests, facility of communication, tourist trade development, etc. . . . Same scheme for Magdalen Islands, according to special plan for them.

(4) *Telephone and telegraph improvements*.—In many sections telephone lines are lacking, although urgently needed, for expansion of commerce. This is one of the first improvements to carry through.

*Fishing ports*

So far our fishing fleet has adjusted itself to shelter facilities, and this has to a very large extent hampered progress. Shelter facilities should adjust themselves to the needs of the fishing fleet and with the mechanization coming, fishing harbours of permanent construction, with usual facilities, ice and cold storage where necessary, spacious fish plants, etc. should be built. In many European countries, they are public property, either municipal or state.

*Housing project*

There is much talk about the disappearance of city slums and one cannot open a magazine without seeing projects or realizations in that particular field. This is most commendable and although the situation is not so bad on our shores, it requires attention. The percentage of tuberculosis is higher on the maritime shores than anywhere else in the province of Quebec. We have no definite figures at hand but the erection of a sanatorium right at the doors of the Gaspé coast vouches for it. As fresh and pure air is not lacking on the shores, contamination must spread through lack of preventive education but also through lack of sanitary and hygienic conditions in too many homes.

Thus a better housing program would secure gainful additional employment while helping to fight the plague. Moreover, fishermen's homes are of lumber construction and huddled in fishing coves. The organization of aqueducts would be here a necessary complement and serve two purposes at the same time: adequate protection against fire hazards and abundant supply of water in the homes for more sanitary living conditions.

*Development of Natural Resources*

We did not have enough time at our disposal for a complete and careful investigation in this particular field outside of fisheries. No doubt many projects could be brought to your attention in agriculture, forestry, mining, hunting and fishing, tourist trade, etc. May we mention, however, that there is enough water power on the maritime shores to supply electricity at cheap prices to homes and industry. On some small sections of our shores only we have electric current, but at prohibitive rates most of the time. Things certainly could be improved.

The DEPUTY CHAIRMAN: Yesterday we had a very formidable presentation from Mr. Forbes by way of a protest against practically the disappearance of the mining prospector, a man who has contributed much to the development of this country, and to-day we have had a very interesting presentation in support of an industry and in support of a group of men who over a long period of years have done much in this country to develop it, if they are not responsible for the discovery of the country itself; and I am sure that we are grateful to Professor Berube for his presentation, and now Professor Berube will be glad to answer any questions you may have to direct to him.

*By Mr. Castleden:*

Q. The matter of mechanization was well dealt with. I thought that we had some splendid evidence here this morning. This committee is going to have to face the problem of mechanization, and I think we can use the fishery field as one of the examples for the study of this problem. We have been informed this morning that if mechanization were used in the fishing industry we could possibly produce the same quantity of food with about one-tenth of the manpower?—A. In some particular cases, yes; as an average I would not say that much.

Q. Probably the average would likely come out at about six to one?—A. It would come out at about five to one in Quebec.

Q. It is not material. The point to consider is the establishment of the principle whether or not we can recommend mechanization and, if so, to what extent we can recommend mechanization not only in the field of the fisheries but in the various fields throughout the whole economic life of this country. Surely we cannot recommend as a committee that we should not mechanize but that we should keep people doing manual labour just for the purpose of providing jobs. I do not think we should recommend that?—A. No.

Q. You have recommended a slow process of change—not to make the change too rapid so as to leave us with a large surplus of unemployed people. but to bring about a slow development and go on encouraging mechanization. In this field do you not think that the important point is going to be this, that if mechanization brings about more efficient production then the benefits of mechanization should be spread among all those who take part in industry, among the people in general? I think the job for this committee is to decide how we can make the benefits of scientific mechanization and scientific production available to the people. I am going to suggest that what we require is that the machinery of production and the machinery of distribution should be owned by those who are in the industry and not by a few individuals who have the machinery and can thereby profit to a large extent in this way. I think we could endorse very heartily the recommendation of assistance by way of federal legislation, something to help these people help themselves in such a field as co-operative organization and co-operative ownership of the machinery and the tools of production and distribution, so as to make the fruits of the labour of these people available to the people.

Mr. HILL: Mr. Chairman, mechanization of the fishing industry will very greatly increase production. Now, the only way that can be successfully accomplished is by doing it gradually as Professor Berube has said. Because

## APPENDIX

Program of Public Works on the Maritime shores.

Very likely public or semi public works will be needed in fisheries to keep employment at a fair level. It will not be necessary to go out of our maritime shores to find suitable projects. Some even are very acutely needed.

May we suggest:—

*Improvement of communications facilities*

(1) *Railway*.—Straightening of curves, lowering of grades, replacement of rails and ties, rebuilding of bridges and trussels in order to permit heavy freight circulation as well as fast passengers and express service in the Gaspé-Campbellton area. Construction, if advisable, of a transgaspesian line through the central mining and forestry areas.

(2) *Water*.—Improvement of natural harbours with deep-water permanent wharf constructions, where needed.

(3) *Roads*.—Completion of a net of good roads, not only on maritime shores but in the interior of the Gaspé Peninsula and on the north shore of the St. Lawrence, for protection of forests, facility of communication, tourist trade development, etc. . . . Same scheme for Magdalen Islands, according to special plan for them.

(4) *Telephone and telegraph improvements*.—In many sections telephone lines are lacking, although urgently needed, for expansion of commerce. This is one of the first improvements to carry through.

*Fishing ports*

So far our fishing fleet has adjusted itself to shelter facilities, and this has to a very large extent hampered progress. Shelter facilities should adjust themselves to the needs of the fishing fleet and with the mechanization coming, fishing harbours of permanent construction, with usual facilities, ice and cold storage where necessary, spacious fish plants, etc. should be built. In many European countries, they are public property, either municipal or state.

*Housing project*

There is much talk about the disappearance of city slums and one cannot open a magazine without seeing projects or realizations in that particular field. This is most commendable and although the situation is not so bad on our shores, it requires attention. The percentage of tuberculosis is higher on the maritime shores than anywhere else in the province of Quebec. We have no definite figures at hand but the erection of a sanatorium right at the doors of the Gaspé coast vouches for it. As fresh and pure air is not lacking on the shores, contamination must spread through lack of preventive education but also through lack of sanitary and hygienic conditions in too many homes.

Thus a better housing program would secure gainful additional employment while helping to fight the plague. Moreover, fishermen's homes are of lumber construction and huddled in fishing coves. The organization of aqueducts would be here a necessary complement and serve two purposes at the same time: adequate protection against fire hazards and abundant supply of water in the homes for more sanitary living conditions.

*Development of Natural Resources*

We did not have enough time at our disposal for a complete and careful investigation in this particular field outside of fisheries. No doubt many projects could be brought to your attention in agriculture, forestry, mining, hunting and fishing, tourist trade, etc. May we mention, however, that there is enough water power on the maritime shores to supply electricity at cheap prices to homes and industry. On some small sections of our shores only we have electric current, but at prohibitive rates most of the time. Things certainly could be improved.

The DEPUTY CHAIRMAN: Yesterday we had a very formidable presentation from Mr. Forbes by way of a protest against practically the disappearance of the mining prospector, a man who has contributed much to the development of this country, and to-day we have had a very interesting presentation in support of an industry and in support of a group of men who over a long period of years have done much in this country to develop it, if they are not responsible for the discovery of the country itself; and I am sure that we are grateful to Professor Berube for his presentation, and now Professor Berube will be glad to answer any questions you may have to direct to him.

*By Mr. Castleden:*

Q. The matter of mechanization was well dealt with. I thought that we had some splendid evidence here this morning. This committee is going to have to face the problem of mechanization, and I think we can use the fishery field as one of the examples for the study of this problem. We have been informed this morning that if mechanization were used in the fishing industry we could possibly produce the same quantity of food with about one-tenth of the manpower?—A. In some particular cases, yes; as an average I would not say that much.

Q. Probably the average would likely come out at about six to one?—A. It would come out at about five to one in Quebec.

Q. It is not material. The point to consider is the establishment of the principle whether or not we can recommend mechanization and, if so, to what extent we can recommend mechanization not only in the field of the fisheries but in the various fields throughout the whole economic life of this country. Surely we cannot recommend as a committee that we should not mechanize but that we should keep people doing manual labour just for the purpose of providing jobs. I do not think we should recommend that?—A. No.

Q. You have recommended a slow process of change—not to make the change too rapid so as to leave us with a large surplus of unemployed people, but to bring about a slow development and go on encouraging mechanization. In this field do you not think that the important point is going to be this, that if mechanization brings about more efficient production then the benefits of mechanization should be spread among all those who take part in industry, among the people in general? I think the job for this committee is to decide how we can make the benefits of scientific mechanization and scientific production available to the people. I am going to suggest that what we require is that the machinery of production and the machinery of distribution should be owned by those who are in the industry and not by a few individuals who have the machinery and can thereby profit to a large extent in this way. I think we could endorse very heartily the recommendation of assistance by way of federal legislation, something to help these people help themselves in such a field as co-operative organization and co-operative ownership of the machinery and the tools of production and distribution, so as to make the fruits of the labour of these people available to the people.

Mr. HILL: Mr. Chairman, mechanization of the fishing industry will very greatly increase production. Now, the only way that can be successfully accomplished is by doing it gradually as Professor Berube has said. Because

you have to find a market for your product, and once you have found a market for your product your mechanization can come in because the men who are thrown out of the work of fishing are taken into employment in the processing and the extra mass production of fish, and that has been successfully proven in my own country. Where formerly 100 fishermen were employed in the fishing industry, by mechanizing the industry you employ fifteen or twenty men with boats and you employ 400 or 500 people to process the fish, providing you can find a market for the processed article. First you find your market, then mechanize, then employ your excess labour, other than those employed in actual fishing, in the processing of the fish.

*By Mr. Bertrand:*

Q. What do you foresee as a world market after the war?—A. I foresee for the first year, undoubtedly, that markets will be larger than they are and the demand for fish will be greater than it is at present, but when the fishing fleets of other countries are reorganized and start producing again we shall get another squeeze.

Q. In your opinion, another depression is inevitable in the fishing industry two or three years after the war?—A. At first the supply will certainly be a lot shorter than the demand, because these other countries have practically no fishing fleets to start off with. What they have saved goes to the war navies, and apart from those that go to the war navies for transport purposes there are many more at the bottom of the ocean. They will have to be rebuilt and while they are rebuilding we shall not have enough fish to meet the demand, and after those fleets have been rebuilt we shall have too much fish. That is the whole problem.

Q. And that is when the depression will be inevitable?—A. That is when we shall get our squeeze in Canada.

Q. A squeeze for the fishermen.

Mr. GILLIS: Mr. Chairman, I want to compliment the witness on his presentation. I think it was about time that someone from the fishing industry came here to say the things that have been said to-day. Professor Berube's evidence was very informative; the fisherman of Canada has been the forgotten man, there is no doubt about that. As far as by-products are concerned, the fishing industry has always been in a depression, and it is in one now, so far as the fisherman himself is concerned and the portion of his product that he receives back in payment.

Now, the most enlightening statement which the witness made today was that the basis of the failure of the development of the co-operative movement in 1923 was lack of education, and I think it is in that field that the most good can be done. I do not believe that developing the fishing industry and leaving the fishermen in the hands of private company buyers is going to be any solution for the man who catches the fish. I believe the greatest contribution that this committee or that the federal government could make to this industry would be to make available grants to the fishing industry to be used in the field of education. Educate the fisherman in marketing and co-operative development, and take most of the results out of the hands of the fellow who has nothing to do with the industry but merely sits back and reaps the rewards of the products that the fisherman takes from the water. I think it is in that field that our greatest contribution can be made to the fisherman.

The figures which were quoted by the witness were not only enlightening, they were startling. A man is expected to live, maintain a family, and be a citizen of Canada on \$150, \$200 or \$300 a year. The average income of the fishing industry right across Canada today is around \$300, and we are supposed not to be in a depression.

There is no way, in my opinion, that you can take a fisherman out of that condition except to base anything we may do in the future on a solid adult educational program among the fishermen themselves. I think that is the shortest cut to the solution of the problem. Once you improve his economic set-up and eliminate the way he is exploited, I think 75 per cent of the job will be done by the men themselves in developing their cooperative movement and eliminating the middle man who exploits them.

I thought I should make these remarks. I am very pleased with the presentation that has been made. I think it was fair; it was informative and it was instructive. When the committee starts to make its final deliberations and bring in a report, special study should be made of the fishermen's problem and recommendations made based on the evidence given us this morning.

*By the Deputy Chairman:*

Q. Is there sufficient production on the Atlantic coast to take care of the demands?—A. War demands?

Q. Normal peace demands, whatever demand there is. What I have in mind is this: from time to time we see carloads of fish coming from the Pacific coast to the Montreal market and going to New York. This fish can only be transported from the Pacific coast at a very high cost. How is it the Pacific coast fish can come into the Atlantic markets and meet your competition?—A. There you open up the question of the taste of the consumer. We cannot produce all that the consumer wants, and even if it costs him more to get the fish from the outside he will get it. In the past, in the province of Quebec, we have eaten crabs from Japan, even though we had our lobsters there. We did that because we found some kind of unusual taste in it. We bought that crab meat at a higher price than we paid for Canadian lobster. That problem will always stay with us. We cannot produce all the consumers' demands and something has to come from the outside. If we can keep this to a minimum so much the better, but that has not taken place yet.

Mr. MATTHEWS: May I ask Mr. McNiven what kind of fish he has reference to as coming from the Pacific coast?

Mr. HILL: There are two classes, halibut and a particular type of salmon.

The WITNESS: Yes.

The DEPUTY CHAIRMAN: How do the B.C. salmon compare with the Gaspé salmon?

Mr. HILL: They do not compare. It is a well known fact it is not of the same quality; it is not the same fish.

The WITNESS: You have one salmon on the B.C. coast that is almost as good as ours. Let us keep a little district pride. It is almost as good, but the majority of the salmon that is caught in B.C. is not as good as the fresh salmon in Quebec.

*By Mr. MacNicol:*

Q. They are all mechanized in B.C.?—A. Yes, they are.

Mr. HILL: And the salmon is produced in such small quantities in the east that they are all eaten locally.

*By Mr. MacKenzie:*

Q. Have you tasted Alaska black cod?—A. I tasted it once and found it excellent; what I liked most in the black cod was the new product that is obtained from the contents of the stomach, the oil.

*By Mr. Matthews:*

Q. You say 90 per cent of the Quebec fish consists of cod? What variety would come next, salmon?—A. No, a cheaper variety, even, herring.

Q. Where would the lobster fish come in?—A. About fifth in rank. I am speaking now of the commercial value. That is what you meant?

Q. Yes, commercial value. You included the lobster, shell fish in your statement this morning?—A. Yes.

Q. Is there any indication that the supply is becoming depleted in any way in the Quebec waters?—A. Very much depleted.

Q. So that with regard to the matter of mechanization and other things you have to look first of all to the supply in the waters—A. We could not mechanize in lobster fishing. If I were called upon to advise, I would have to advise to cut two-thirds at least of the actual fishing to keep the supply in Quebec from getting down to an abnormally low bottom.

*By Mr. Hill:*

Q. There is no depletion of herring nor is there very much depletion of codfish?—A. No, they can stand any amount of fishing.

*By Mr. Matthews:*

Q. The cod can?—A. Yes.

Mr. HILL: Cod and herring.

*By the Deputy Chairman:*

Q. What about the eel?—A. It is fished for in fresh water only in Quebec; it goes up and down, up and down.

Mr. GILLIS: It is not a fish, anyway, it is a snake.

*By Mr. Matthews:*

Q. Are other means taken in the matter of hatcheries and that sort of thing?—A. For which fish?

Q. Any of them, the lobster particularly, anyway, I suppose.—A. We have in Quebec as well as in the maritimes quite a program of lobster hatching, and we have found out—I have to quote from memory now—in 1904 or 1908 that it cost the federal government something like \$2.50 or so to raise a pound of lobster that was sold at 6 cents. That is why it was discarded. I am quoting from memory now, but I can give you the exact figures on the point if you want them.

Q. No, that is all right.

*By Mr. Bertrand:*

Q. There is a salmon hatchery in Gaspé?—A. Yes.

Q. There are more hatcheries than the Gaspé one?—A. We have only two salmon hatcheries in Quebec, at Tadoussac and the Saguenay.

*By Mr. Ross (Calgary):*

Q. What explanation can be given for the spread in price between what the fisherman receives and what the retailer sells the fish for; can you give any break-down in any way?—A. I can make a very fair guess. There are two kinds of middle agents, if I can call them that. Some of them are absolutely necessary, and some that the co-operative movement tried to replace. The necessary middle men, if I can call them that, would be the transport companies and they take quite a fair part.

*By Mr. Hill:*

Q. Cold storage?—A. Cold storage and so on. These are absolutely necessary and take quite a large part in the gap. The biggest profit is taken by the retailer, but one must take into account the fact that the retailers of fish do not handle very large quantities, and they have to take a very large margin of profit to be able to make at least a decent profit.

*By Mr. Bertrand:*

Q. It is a very perishable commodity?—A. Yes.

Mr. HILL: There is one feature that I never could understand. You often see this happen, a fisherman getting from 2 to 5 cents a pound for his fish and that same fish selling at retail for 25 cents a pound. If the government forced a price of 10 cents to the fisherman it would only increase the retailer's price by another 3 or 4 cents. It is such a small amount that the consumer, I think, can stand it and would be willing to pay it if it meant a higher price to the fisherman. I have known fishermen getting one cent a pound for fish that was selling at 20 cents a pound. If the price to the fisherman was doubled it would only mean an increase of one cent to the consumer. If the fisherman was given an increase of 5 cents it would only mean a price of 25 cents a pound to the consumer. I never could understand why the government did not step in and order a small increase in the price of fish to the fishermen.

The WITNESS: The question you raise brings in again the whole question of the purchasing power of the consumer. If it stays at a fair level we can ask a decent price for fish. With a decent price for fish it would mean a decent price to the fisherman at the bottom of the ladder. The trouble is this, if we want to raise the price by half a cent or a quarter of a cent on the market, in a free economy we get hell from all the wholesalers, retailers and consumers. I had experience in that in the pre-war reconstruction days when I handled a fisheries business in Montreal from 1929 to 1939, before the war.

*By Mr. MacNicol:*

Q. Where is your principal market?—A. Export. Even in Quebec now the best market for the fishermen is the export market.

Q. You mean the— —A. The United States, England, and the West Indies. These are the three main export markets.

Q. You do not ship to Chicago?—A. Not that I know of so far.

*By Mr. Matthews:*

Q. What is your average season for codfish?—A. Six months.

Q. From?—A. From June to November, inclusive.

Q. You quoted some of the financial returns to these men and they are rather alarming. To what extent can they find employment during the other six months of the year; can they get other employment during the other six months of the year to any extent?—A. During the crisis there was none, but now there is the lumbering industry, wood cutting. A good many of these low income earners among the fishermen have a small farm from which they can derive some benefit. That is why even with low average incomes we have misery for those who have to rely on fishing only to get their living.

*By Mr. MacNicol:*

Q. You said something about 25,000,000 pounds of fish exported from Gaspé within a year's time. What is the principal port of export?—A. Ports lying along the borders of the United States.

Q. Fish have to be brought in somewhere.—A. I am sorry, I do not get the meaning of your question. Gaspé is the centralizing point for the export of the Gaspé coast.

Q. Gaspé town?—A. Yes.

Q. And it ships out of there in ships?—A. Some in ships, but a very small portion; from Gaspé it goes by rail to Montreal or directly to the export market.

Q. By express cars?—A. By freight cars, mostly, because it is a lot cheaper.

Q. I have agreed with much that the gentleman has said. While he was speaking I kept saying to myself, what the consumer wants is good fish. He wants it as fresh as he can get it in the shortest space of time from the time it

leaves the water until it arrives on his table; and the company which can lay fish on the consumer's table in the city of Toronto, Chicago, Pittsburgh, or any of the big purchasing cities, in the freshest state is the company that is going to get the orders for fish.

May I go now from Gaspé to the west. Some mention was made a few moments ago about fish from B.C. Fish from B.C. is shipped by express.

The WITNESS: Part of the fish is shipped by express.

Mr. MACNICOL: All fish shipped from Prince Rupert or any of the exporting B.C. cities is based on the express rate from Seattle and Portland to Chicago. In other words, it is free until it arrives at the competing point where the express rate is the same as that of Portland or Seattle to Chicago. In the northern part of Saskatchewan and the northern part of Alberta, where they take out large quantities of fish, they are now sending it from Great Bear lake, Great Slave lake and the Athabasca lake, and all those lakes in the northern part of Canada, by aeroplane to Waterways, and from Waterways by express cars go approximately 50 tons a week of fresh water fish to the Chicago market. I am always amazed at the vast quantities of fish that go to Chicago.

Mr. HILL: I went into this very carefully back in 1927. The C.P.R. have their own rates from Prince Rupert, and they qualify them as fast freight express.

Mr. MATTHEWS: The C.N.R.

Mr. HILL: Yes; the C.P.R. from Vancouver. They call them fast freight express. It is not an express rate as we understand express, because they will bring a hundred pounds of fish from Prince Rupert, 3,000 miles in to the Toronto market, for \$5, and they charge us to bring it from Saint John to Toronto, a distance of 700 miles, \$11, twice as much. They bring it 3,000 miles from the Pacific coast at less than half what they charge us to bring it from Saint John.

The DEPUTY CHAIRMAN: Carload rates in each case?

Mr. HILL: Carload rates in each case. They claim they can build up a whole trainload on the B.C. coast and bring it out as one train and give it running rights right through without stop; in other words, look upon it as an express train. With us they have to put them on the through passenger train. They charge us 11 cents a pound for moving it 700 miles and they only charge the B.C. companies 5 cents a pound to move it 3,000 miles. We are always faced with that same difficulty. They charge twice as much for moving fish from the maritimes to the central markets as they charge the Pacific coast shippers.

Mr. MACNICOL: It is a long distance from Prince Rupert to Edmonton. From Waterways to Edmonton is 305 miles, and I believe Prince Rupert is about 1,000 miles farther on. When the fish arrives at Edmonton it starts off at the same rate to Chicago.

Mr. HILL: The freight rate structure is not understandable because the C.P.R. will bring processed fish from Norway and tranship it at Liverpool, and tranship it again at Montreal, and lay it down in Calgary for 85 cents a hundred pounds. By the way, they do the transferring themselves. They charge \$1.05 for Canadian processed fish laid down in Calgary, against 85 cents for processed fish brought from Norway and transferred twice at their own cost.

The DEPUTY CHAIRMAN: What is the explanation?

Mr. HILL: They never gave an explanation except that they wanted to keep their boats in the export business moving.

Mr. MACNICOL: I am in agreement with the mechanization of your boats. I agree with what Mr. Hill says. He is a fisherman; he knows what he is talking about. If your boats are mechanized you would catch your fish much more speedily and you would get more. You would also get them on the market a

little more quickly. I am in accord with your suggestion on refrigeration, and that should apply to all Canada. Last summer I happened to be at The Pas when a boat of fish came in there with 50 tons of fish. This boat arrived after the train had gone out. That fish had to lie there till the next day because there is only one train a day. I said to the man who had the fish, "How are you going to keep this fish until the train goes out the next day?" He said, "I have them all boxed in ice." That is all extra cost to the fisherman, is it not? Now, if there had been a refrigeration plant there, or a cold storage plant, in which he could have placed the fish from his boat, it would not deteriorate in the next twenty-four hours; of course packed in ice helps, and it would reach the market in better condition. We have to wake up in this country and do more for our fishermen. We have to put them in a position to compete. You cannot compete if you cannot catch your fish quickly, and you cannot compete in the markets unless you can get your fish on the markets in a fresher condition.

The consumer is not going to buy fish that is three or four days out of the water if he can buy fish that has been out of the water for less than twenty-four hours. I think our fishing department should thoroughly survey what Mr. Berube has presented this morning and what other fishermen throughout Canada are able to present, with a view to placing the Canadian fishing industry on a competitive basis with fishing industries elsewhere. You cannot hold the market unless you can compete. Every business man knows that.

The WITNESS: As far as the policy at Quebec is concerned, we are in a privileged position. Our fish comes in the same day it is caught, at most the next day. No fishing trip is longer than two days, and when a fishing trip is two days long the fish caught the first day does not go to the fresh fish business. Secondly, in regard to the problem you mentioned, the government in the province of Quebec has organized cold storage plants with quick freezing capacity, right on the shore where the fish come in, so that they can be frozen right away into a state of rigor mortis. You know what that means, since you are a fisherman.

Mr. HILL: Frozen fresh fish.

The WITNESS: Well, these fish can stand longer transportation without any harm provided the refrigerating car is kept at the minimum temperature required.

Mr. MACNICOL: Kept at a stationary temperature. You do not want it to be 10 below freezing one moment and 15 below the next.

The WITNESS: Equal temperature, and with this we can ship by freight at lower rates and get a larger income for our fishermen. That is why frozen fillets in particular have expanded to the extent they have in the province of Quebec. We can have fresher fish. We have freezing facilities right on the shore. Then, we have the markets open—

*By Mr. MacNicol:*

Q. After the war you will likely have aeroplanes of 50-ton capacity. Some of the bombers now actually carry eight 1,000-pound bombs, which amounts to 4 tons.

Mr. HILL: You have 25-ton capacity now.

*By Mr. MacNicol:*

Q. If a 50-ton aeroplane left Gaspé to-night the Montreal market would have your fish next morning. Would not that help?—A. We are up against certain delays in the cutting of fillets. You cannot cut a fillet right out of the fresh fish, it has to stand a few hours in ice to stiffen the flesh. Even with these hours added we can cut the fillet during the evening, a plane could leave at midnight or after midnight and be in Montreal the next morning.

Q. That is one of the things you have to look forward to, getting the fish as speedily as possible to the market.

*By Mr. Bertrand:*

Q. What is your proportion of fresh fish?—A. It is growing lower and lower by years.

Mr. JEAN: Have you considered the salt fish industry?

Mr. BERTRAND: I mean fresh fish.

The WITNESS: Fresh against frozen or fresh against salt?

*By Mr. Bertrand:*

Q. Fish on the market as fresh fish; frozen fish is another category.—A. Not by the standards. Fish frozen would be of a standard equal to fresh fish.

Q. The type on the market is about the same?—A. About.

Q. What proportion of frozen fish?—A. The proportion? I have a graph here that will come in handy.

Mr. MACNICOL: The aeroplane could have your fish in Toronto, Hamilton, or Windsor in the morning.

Mr. CASTLEDEN: That does not guarantee that the fisherman would get a higher price for his fish.

Mr. MACNICOL: Yes, he would.

Mr. GILLIS: Someone else would get it, the company owning the plane and so on.

The WITNESS: Answering Mr. Bertrand's question, in 1932 3 per cent of our production went to fresh and frozen fish, and 80 per cent went to salt and dried fish. Ten years after, in 1942, some 52 per cent of the production went to the fresh fish trade and a little above 30 per cent to the dried fish trade. That is what we accomplished in ten years.

*By Mr. Matthews:*

Q. Would that be much the same as the situation in the Lunenburg fisheries?—A. Not exactly the same because the Lunenburg fleet does not follow the same methods of fishing we do.

Mr. HILL: We have a bigger percentage of that because we had a start on you.

The WITNESS: You had a start of about twenty years on us.

Mr. HILL: Yes.

*By the Deputy Chairman:*

Q. Is there any duty on fish going to the United States?—A. Yes, there is, but I cannot give you the exact amount. I do not think it can be removed.

Mr. HILL: They cut it quite heavily five or six years ago.

*By Mr. MacKenzie:*

Q. I have one question: How far up the St. Lawrence do you catch cod and salmon?—A. The last place we catch cod, to my knowledge, is above Rimouski, but accidentally only. As far as salmon are concerned, there are a few caught at Ste. Anne de Beaupre, but only accidentally. Commercial fishing ends at about Metane.

Q. I had some very fine cod at Ste. Anne in the hotel there about three or four years ago, and I was wondering where they came from. They were lovely fresh fish and must have been caught close by. A. They must have been caught from this district here, along the Gaspé.

Q. They came from that long distance?—A. Yes.

*By Mr. Matthews:*

Q. Where is the principal mackerel exporting centre in the maritimes?—A. The shipping point of mackerel?

Q. Yes.—A. There are many shipping points. They are taken as an extra to codfish. When they happen to strike mackerel and there are no cod they go into the mackerel fishing. If you had some mackerel fishing regularly it would be different, but they are the exception on the Gaspé coast. The fishing for mackerel, as far as Quebec is concerned is centred on Magdalen islands. That is where they catch a lot.

Q. Speaking of shipping facilities, fresh mackerel can be bought in certain houses in Winnipeg, for instance, with just as good flavour as when they were taken out of the water; the facilities must be very very good, because the flavour is not impaired to any extent at all.

Mr. MacNICOL: Mr. Chairman, it is about 1 o'clock. Coming from Toronto I should like to compliment Mr. Berube on his very fine presentation. He is one of the best witnesses we have had here, and he deserves extra praise because of the fact that he spoke to us in English, which is not his tongue. He did excellently well, and I suppose if he were speaking to the committee and they were all French-speaking people he would do even better. I think he deserves special credit for addressing us in the language which most of us understand. I listened to his report with great interest. He has made some very good suggestions and later on we might refer them to the Minister of Fisheries and try to persuade him to do something to help the fishermen along the Gaspé, the St. Lawrence people, and also the whole of the maritimes. We all have a very warm feeling for the people of the maritimes. They have gone through very hard times.

The WITNESS: May I acknowledge here that the co-operative work that has been done on the coast has been done through a branch of the Department of Fisheries at Ottawa and that in that development the government of Quebec has co-operated too, not by a grant for educational facilities but especially with regard to cold storage facilities, the borrowing of the needed money, and so on. What we have found is that the governments are willing to help those who want to help themselves.

Mr. BERTRAND: In seconding Mr. MacNicol's motion I want to say one more thing: the witness has stressed the importance of the work of the staff at the fishery school in the province of Quebec, but he omitted very humbly to speak of himself. I should like to say that if many of the professors of that school are men of the calibre of Professor Berube we can envisage the future of the fisheries in that part of the country with a little more brilliancy.

The DEPUTY CHAIRMAN: Professor Berube, the committee extends a vote of thanks to you for coming here to-day and presenting your admirable brief.

The WITNESS: Thank you very much, Mr. Chairman, the pleasure has been mine.

Mr. GILLIS: Before we adjourn I would like to ask when we may expect some representative from the James sub-committee on labour.

The DEPUTY CHAIRMAN: That matter is on the agenda, but I do not know when such witnesses will be called. Representatives from the various provinces, the Canadian Manufacturers' Association; representatives of mayors and labour have yet to be heard, and we hope to bring them here as rapidly as we can.

The committee adjourned to meet Friday, May 21, at 11 o'clock a.m.







Doc. Canada Reconstruction and Re-establishment,  
an Spec. Cttee on, 1943/44  
on  
2

SESSION 1943  
(HOUSE OF COMMONS)

(SPECIAL COMMITTEE)

ON

# RECONSTRUCTION AND RE-ESTABLISHMENT

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 15

FRIDAY, MAY 21, 1943

## WITNESSES:

Mr. D. W. McLachlan, Department of Transport;  
Mr. S. W. Fairweather, Chief of Research and Development, Canadian  
National Railways.

OTTAWA  
EDMOND CLOUTIER  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1943





## MINUTES OF PROCEEDINGS

FRIDAY, May 21, 1943.

The Special Committee on Reconstruction and Re-establishment met at 11.00 o'clock a.m., the chairman, Mr. J. G. Turgeon, presiding.

*Members present:* Messrs. Authier, Bence, Bertrand (*Prescott*), Castleden, Eudes, Ferron, Gillis, Jean, MacKenzie (*Neebawa*), MacNicol, McDonald (*Pontiac*), McKinnon (*Kenora-Rainy River*), McNiven, Matthews, Nielsen (*Mrs.*), Purdy, Ross (*Calgary East*), Sanderson, Turgeon.

*In attendance:* Mr. D. W. McLachlan, Department of Transport; Mr. S. W. Fairweather, Chief of Research and Development, Canadian National Railways.

Mr. McLachlan was called, heard regarding the estimated cost of constructing a causeway across the Strait of Canso and questioned.

In the absence of the chairman, the vice-chairman, Mr. D. A. McNiven, took the chair.

Mr. Fairweather was called, heard regarding the transportation of coal and other commodities from Cape Breton, particularly in war time, and questioned.

The chairman informed the Committee that Sir William Beveridge would appear before a joint meeting of the Special Committee on Social Security and this Committee, to be held in the Railway Committee room on Tuesday, May 25, at 10.45 a.m. Members were requested to present any questions which they might wish to put to Sir William to the Chairman, in writing, not later than Monday. In order that there might be no difficulty in their obtaining reserved seats, members were also requested to bring with them their notices of the meeting.

The Committee adjourned at 1.05 o'clock, p.m., to meet again Tuesday, May 25, at 10.45 a.m.

A. L. BURGESS,  
*Acting Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

May 21, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 11 o'clock a.m. The Chairman, Mr. J. G. Turgeon, presided.

The CHAIRMAN: We have with us today Mr. S. W. Fairweather, who is chief of research and development of the Canadian National Railways, and Mr. D. W. McLachlan, who is in charge of designs and construction with the federal Department of Transport. They will be dealing with the question of further development of the coal industry of Nova Scotia, and in particular with transportation, especially having regard to what has been called the bottleneck of transportation at the Canso strait. I will ask Mr. McLachlan if he will come first and give us his evidence.

Mr. BLACK: Mr. Chairman, before you take up that subject, I wonder if we could have an understanding that these gentlemen give us information with respect to the causeway or tunnel at Prince Edward island. I think our committee should have that information, perhaps not today, but before this phase of our inquiries is completed.

The CHAIRMAN: That may receive consideration. That did not come up before, and I did not ask either of these gentlemen to be prepared to deal with it. I do not know whether they are or not. If they do not do it today, we can give consideration to the matter at the steering committee for another occasion. I will now call on Mr. McLachlan.

Mr. D. W. McLACHLAN, Department of Transport, called.

The WITNESS: As the government of Canada is asked to investigate the possibility of building a causeway in order to avoid the use of the car ferry at the Strait of Canso, the following is presented:

The Strait of Canso separates Cape Breton island from the mainland of the province of Nova Scotia. It is about 16 miles long, and is strikingly uniform in width and depth. Its general width is about 4000 feet with depth about the same at either end. Its least depth which is 100 feet at low tide is found at each end with greatest depth, 160 feet, near the middle of its length. Its shores and bed are formed in solid rock and depth is usually about the same from side to side. The rise of spring tides at Arichat at the Atlantic end is given as 6 feet on official charts. At Cape Jack at the Gulf end it is given at 4½. Instantaneous differences of level reach 3 feet and maximum tidal currents vary from 3 to 4 knots dependent on width and depth.

If you will look at the chart there, you can check me on each of these things. Continuing:

The country west of the strait is high and a long decline is used to reach the level of the wharf at Port Mulgrave, the westerly terminal of the car ferry.

The country east of the Gut is not as high as the west side and no steep grades are required to leave the wharf surface at Point Tupper which is the easterly terminal of the car ferry. From Point Tupper three lines of railway radiate to the northerly and easterly ports of Cape Breton island. Computations show the tidal flow back and forth through the Gut of Canso must reach about 1,220,000 c.f.s. at some period in each spring tide and the interchange of water must reach close to 18,000,000,000 cubic feet as estimated by Mr. Fairweather.

The quantity of water passing in and out of the Gut of Canso each tide approximates that passing under the Quebec bridge. Foundation conditions and ice conditions along with depth of water make the problem of bridging the Gut of Canso not unlike that of bridging the St. Lawrence above Quebec and thus the cost of a bridge may be taken as about \$20,000,000.

I might say that actually it is a little deeper at Quebec and a little narrower than at the Gut of Canso. I thought I ought to dispose of the tunnel and bridge before we started to discuss the causeway. Continuing:

As a tunnel under the Gut of Canso would have to be more than 150 feet below the water surface, and as a fault in the rock if open would admit water in large quantities, a tunnel cannot be put forward as a feasible proposition until, or unless, subsurface borings show the country to be free from such disturbances. A boring survey that would prove the non-existence of a fault would be very costly and very hard to make on account of the depth of the water at sites which might be used for a tunnel.

As a consequence, you may dismiss both a bridge and a tunnel as being more costly than a causeway.

A jetty or causeway completely blocking the Gut of Canso or one with a lock has been suggested.

Trial estimates of a causeway for railway and highway traffic at a number of sites shows the location at Point Tupper to be the cheapest when the cost of a railway approach is added to that of the causeway. At Point Tupper the depth of the water in the centre of the channel as shown on charts is about 150 feet. At this point width is 4200 feet and the cross sectional area at low tide is about 263,000 square feet. Tidal currents on one side are shown at 4 knots, on the other at  $3\frac{1}{2}$  knots. The surface velocity may be taken at 6.2 feet per second and the average velocity in the section about 5 feet per second at the time the work of blocking the section would begin. As rock is deposited, velocities would be increased until a velocity of 14 feet per second would be reached just before closure.

Experience shows a closure of the kind which would be necessary can best be made by working from the bottom up, not from side to side.

I might mention there, aside from what it is in the memo here, that I saw them trying to close the Saguenay river by working from side to side and they were unable to do it because, as the channel narrowed, the velocity got so high—it got up to 20 feet per second in that case—that they could not get the rocks to stay in place. Down at Messina, the Aluminum Company blocked the south Sault channel which was carrying about 60,000 second feet quite successfully by working from the bottom up. Continuing:

Experiments have been conducted in laboratories to determine the relationship between the size of stone, the velocity of the water and the slope of the under surface which must be followed if stones when dropped are to remain stationary on the jetty surface.

I have a few diagrams here which I will distribute around. There is a section here which might be interesting if held up or something.

Mr. FAIRWEATHER: It might be circulated around.

The WITNESS: Yes. You might circulate it around. Continuing:

The relationship for angular and round stones as determined by competent authority is shown on a diagram attached.

If you look at that diagram, you will see the velocity required in order to ensure that stones of a given size will remain stationary when dropped from the surface to the bottom that is composed of a foundation of the same size. As a consequence you will see that you could start that with stones of perhaps 100 pounds each and work up until you get that channel half blocked. Then you would have to jump your size up to about 900 pounds and go along for some

distance above that, and ultimately go up to stones weighing about 7 tons each before they would stay in place if they were dropped through the water. The reason for that is the water going by at 14 feet a second would roll the stones over and down the slope unless that relationship is adhered to. Continuing:

These have been applied to the case of the Gut of Canso and a series of sizes and slopes are indicated which are believed to be stable. These show a causeway 50 feet wide on top can be built by use of 3,231,000 cubic yards of granite rock about 33 per cent of which would have to be 7-ton blocks.

Selected rockfills made by use of excavated granite or other heavy stone where hauls were short have been made for about \$2.25 per cubic yard at many places in Canada in recent years. At Long Beach in California a very large volume of rock was dumped for a breakwater at a cost of \$2.40 per cubic yard in 1937. In the same project a very large quantity of rock was placed by derriek for \$2.90 per cubic yard. In 1929 a large quantity of rock was placed in a breakwater in Saint John, N.B., at a cost of \$2.50 per cubic yard.

I could give you twenty-five other cases where rockfills of considerable volume have been made for different prices, but I do not know that there is any need of elaborating. Continuing:

At the Gut of Canso the excessive quantities required would reduce costs but the large sizes required and the difficulties of placing would increase costs. It is believed the rock in the lower half of the causeway might be placed for about \$1.75 and that in the upper half for about \$2.75 per cubic yard. An average price of \$2.25 has been used in estimates.

The causeway as located required a single track railway approach tunnel 3,000 feet long on the west side. This, with trackage, is estimated to cost an additional \$600,000 and make the cost of tunnel and causeway \$7,900,000.

The blocking of the Gut of Canso with a solid fill would increase sailing distances between Halifax and Montreal by 107 miles and between Halifax and Charlottetown by 248 miles.

The above extra distances would probably force the addition of a lock to any structure blocking the Strait of Canso. A lock of the kind required at the Gut of Canso usually costs about \$1.65 per cubic foot of usable volume. A lock 650 feet long, 70 feet wide, and 30 feet deep at low tide with lift bridge would cost about \$4,000,000. This added to the cost of the causeway gives a total of about \$12,000,000 without any addition or improvement of railway lines leading to the so-called bottleneck at the strait.

The assembly of information connected with the cost of operation of car ferries at the Gut of Canso and that of railway improvement and operations generally is dealt with by Mr. S. W. Fairweather. The maintenance and operation of an isolated lock such as would be required at the Gut of Canso would be about \$50,000 per year. The cost of maintaining the causeway once it is built should not be large.

Attached hereto are two diagrams illustrating the kind of causeway contemplated and the basis of its design.

Now, the size of the stone as I said before at the top surface of the causeway would be greater than that used at the bottom, and depth and current are factors in determining the size of the stone used. Of course, different sizes could be used on the slope—on the gulf side I have shown a slope that would arrest or stop the blocks even if they were started by the current at the top. You will notice that the slope is 0.27 feet vertically to 1.0 horizontally. Once the structure, of course, is completed it becomes stable and all you have to be concerned with is wave action at high tide; the question of the current carrying along the stone no longer affects the operation. But as soon as you get above tide level you start to think of the waves, as to what they would do to the rock slopes; and in that diagram I use 1½ horizontal to 1 vertical above the base structure. If you compare a cross section of that structure with ordinary rock fills you will see that it is just the

reverse of the ordinary breakwater which you have often built at the entrance to harbours; the slopes are steep towards the top and flat towards the bottom. In the ordinary breakwater the gentle slope is near the top where the waves come into play and quite steep down in the deeper parts where there is no wave action. You will also note that the slope is different on the two sides. When you look at the tidal diagram between Arichat and Cape Jock, you will see that the water remains almost at the same level at either end of the strait during three quarters of the tidal period, and throughout one quarter of the total period it rises much higher on the Atlantic side than it does on the gulf side and that means that the three foot difference of three feet in level gives you the high velocities of currents shown on the chart. The action of this current will be to roll the stones during construction towards the gulf rather than towards the Atlantic. I do not think there will be any need for using a flat slope on the Atlantic side, but you do have to know what your wave action is going to be near the surface.

I think that is all I have to say, unless there are some questions you would like to ask.

The CHAIRMAN: Thank you, Mr. McLachlan.

Do members of the committee wish to ask Mr. McLachlan questions concerning the matters on which he has dealt particularly, or do you wish to hear Mr. Fairweather first and then ask questions to both when Mr. Fairweather is through?

*By Mrs. Nielsen:*

Q. I would like to ask one question before we go on. Could you, please, give any idea to the committee of the number of men required and the length of time required for a project of this kind?—A. I have not made any estimates on that. Usually labour runs, or would account for, about 50 per cent of the cost of the structure. The maximum speed with which you could build depends on the amount of equipment you have to do the work. I might tell you this, that in the Long Beach breakwater in California they placed 75,000 cu. yds. per month, that was the best they could do. Now, you have two million and a quarter cu. yds. to place and you can see how long a job it is.

*By the Chairman:*

Q. How many men did they employ?—A. I am sorry. I don't remember that. It would certainly be a job running into a couple of years at least, perhaps three. It would be a long job because the rock would have to be quarried to rather special sizes to give large chunks; at least, in the latter stages of the construction and then it would have to be loaded on to scows. The scows would probably have movable platforms of some kind so the rock could be dumped. I do not think the ordinary dumping scow could be used in the later stages at all, you would have to have very special equipment; you would have to lower the rock into an exact position. It would wreck the ordinary dumping scow. And it would be very slow if you tried to place the stone in position by derrick, so I think special scow equipment would have to be built and put on the job in order to deposit the rock where required.

*By Mr. MacNicol:*

Q. And those scows would have to be built specially for that work?—A. Yes, absolutely; and more than that, I do not know of any job in the universe like it. I do not know of any place where anybody has ever attempted to block a tideway where the water was flowing to start off at around 4 knots, and a channel 100 feet to 150 feet deep and say 4,000 feet wide. I do not know of any place where anybody has ever attempted to do that. I do not know of any place where quantities as large as would be necessary have been placed into any one structure of that kind. It is really a very special job you are tackling.

*By Mr. Bertrand:*

Q. What is the estimated cost for the causeway?—A. For the causeway, \$8,000,000; and for the lock \$4,000,000. But remember, if you build a smaller lock it would cost less. There are many reasons which would indicate that it would be unwise to build a big lock there. I think a small lock, one adequate to take care of the bulk of the boats would be sufficient; and any of the larger boats could go around through Cabot Strait without any great loss of distance. I do not think any big lock will be called for there, but rather that a small one would be preferable. What I have in mind is something like the St. Peter's lock in the St. Peter's Canal which runs across Cape Breton. I think the dimensions of that lock are 280 feet long by 48 feet wide; it is quite a small lock, a lock of that type would not cost more than one-third of a lock of the type I have been talking about.

*By Mr. McDonald (Pontiac):*

Q. As a matter of fact, is there much navigation through that strait?—A. I do not know exactly what there is, but some years ago when we were considering the Chignecto Canal, we in our office did a lot of work on that. Our study went to show that the saving in building the Chignecto Canal—with lock about 500 feet long by 60 feet wide and 25 feet deep—would be about \$370,000 a year. The cost of that canal was estimated to be around \$40,000,000, the interest around \$1,500,000; so there was no economy in building the Chignecto Canal. And I might say, that the probable benefits from the Chignecto Canal would have been somewhere near the costs which might be expected to result from the blocking of the Strait of Canso; I have not made a study of it, I have simply looked at the old reports.

Q. What would be the probable cost of building the bridge?—A. I would say a bridge would certainly cost around \$20,000,000, for a bridge like you have at Quebec. I do not think you would have to build a double-track bridge, just the railway and two narrow highway lanes on either side of the bridge, that would save a little in the width of it.

*By Mr. Gillis:*

Q. Have you any knowledge of the survey made by the engineering firm of Waddell, Hardistey and Company, of New York, and the report they made following a study of this particular matter?—A. No, I have never heard of it.

Q. There is complete description of it in Vernon's History of Nova Scotia. I have that up in my office. It was estimated at that time that it would cost about \$5,000,000 to bridge that strait; that is in 1906 though, and of course materials have changed in price quite a lot since then and it would cost much more to-day. But that is a very eminent engineering company and that report was given by this company at that time. It is available, that report can be had. As I understand your presentation to the committee this morning, you do not visualize a bridge at all; in plain simple non-technical terms you describe a breakwater across the strait that would give you railway facilities across there— —A. And a highway.

Q. And a highway. I do not know anything about the technicalities involved. I just mentioned this report of Hardistey's because I have a description of it in the office, and I have had the privilege of meeting one of the men from that firm who is now employed by the American government on important war work. He was over here last year on this and other matters and discussed the matter with myself; they are still interested in it, and they still have that report and have plans and would like to go ahead with that work. That was their estimate at that time, in 1906, approximately \$5,000,000. I do not know what your material costs would be now. I have a memorandum here, just while

we are on this phase of it. It was drafted by people who are very much interested and have some knowledge of the problem; and for your benefit, and for your comments, I would just like to read this. It is not very long. This was prepared just recently. It says:

The shortage of steamers which has been developing for the last three years has become so acute that there is grave uncertainty as to whether sufficient can be procured in any manner to handle coal, steel and primary products for the manufacture of steel between Cape Breton, Nova Scotia, and other points in the maritime provinces, as well as central Canada, even in the season of 1942. If the sinkings continue it would appear that for a certainty this will not be possible in the season of 1943 or thereafter until cessation of hostilities. To overcome this situation the alternative is relocating the Canadian National Railway line from Sydney to Moncton, N.B., via St. Peter's, C.B. and Port Hastings, thence across the Strait of Canso to Cape Porcupine, and along a sea level picked route to Moncton.

Aside from crossing the Strait of Canso itself, a complete new railway from Sydney to Moncton—a distance of 340 miles—at \$50,000 per mile, would cost approximately \$17,000,000.

I think, in addition to the causeway it is conceded in that article that something would also have to be done with that (the railway) all the way from Sydney to Truro.

The Strait of Canso crossing could be made by a causeway from the point of the beach at Port Hastings to the opposite shore at Cape Porcupine, a distance of 4,000 feet, by blasting Cape Porcupine rock, which rises approximately 640 feet almost perpendicular from the Strait of Canso shore and conveying that rock by belt conveyors into the opening to be filled between both shores.

The present railway system from Sydney to the Strait of Canso permits only of 18 loaded car trains with one locomotive, and the same number across the Strait of Canso ferry each trip, or approximately 200 cars per day, loaded and empty. From Mulgrave to Stellarton the capacity of the railway is said to be 20 loaded cars per one locomotive train. From Stellarton to Moncton 25 loaded car trains is said to be the maximum.

Relocating the railway from Sydney to Moncton as suggested by building it on the same grade as the Transcontinental between Moncton and western Canada, would mean 65 loaded car trains could be comfortably handled. In fact 75 to 100 car trains are handled west of Moncton at times, depending on the power of the locomotive. This would enable the Canadian National Railway, with proper equipment, to transport, from Sydney to central Canada, 1,500,000 tons of coal annually at the rate of 4,875 gross tons per day; in other words, a train and a half a day for 300 days in the year, and eliminate practically entirely the need of steamers to carry coal in the summer season to the St. Lawrence.

I think it is very pertinent indeed, with respect to the transportation of coal in the aftermath of the war.

The question arises how would vessels get through the Strait of Canso. The need of this, particularly under existing conditions is of very limited importance. A nine-knot steamer under ordinary weather conditions can circle the island of Cape Breton in twenty-four hours.

The few steamers using the Strait of Canso in normal times up to and down from the St. Lawrence would simply lose approximately ten to twelve hours going through the Cabot Strait instead of the Strait of Canso.

To take care of local shipping, such as motorboats, fishing boats and coasters, it is proposed to build a marine railway or slip over the beach at Port Hastings and haul them back and forth as the need arises, a very simple and uncostly arrangement.

It is estimated by engineers who have been consulted that the gap between the beach at Port Hastings and the shore at Cape Porcupine could be filled for approximately \$3,000,000. The shore connections between this causeway and the present railway system on each side of the Strait of Canso should not cost at the outside more than \$500,000. This expenditure would simply form a section of the relocating line from Sydney to Moncton, and give the use of the causeway to the present line without interruption to the traffic in any form while the larger program of constructing the new line would be in progress.

This causeway, with proper equipment for drilling and blasting, should be filled in and completed within between six and nine months if energetically directed, and the railway connection on each side should not occupy any longer than twelve months. There does not seem to be any difficult engineering to be overcome.

The coal and steel industries of Cape Breton as well as all the business carried on in the island and shipments from and to Newfoundland through the port of North Sydney are entirely dependent at the present time on a twenty-seven year old ferry across the Strait of Canso. Under the ordinary conditions a steel steamer would be scrapped before reaching that age. The strong current at times, fog and drift ice and the human element connected with its navigation, to say nothing of submarine menace, may result in the ferry being a thing of the past any day. To take its place the Canadian National Railway only has a forty-one year old ferry which is doing duty as a spare between the Strait of Canso and Northumberland Strait between Borden and Cape Tormentine. This ferry too was due on the scrap heap a good many years ago. The cost of \$17,000,000 for building a new railway from Sydney to Moncton does not take into account recoveries from rails, accessories and ties, and steel bridges on the present line, which should be of considerable value.

The elimination of the steam ferry over the Strait of Canso would save to the Canadian National Railway from half a million to three-quarters of a million dollars annually.

At the present time it takes from five to ten hours or an average of seven and one-half hours from the time a freight train arrives on either side of the Strait of Canso until it departs from the opposite side. In other words, a freight train from Sydney going straight through over the proposed causeway at the Strait of Canso would be approximately at Truro before it would depart from Mulgrave under existing conditions.

And now, this is not my analysis; that is drafted by people who might be considered competent; and I merely read it to you to get your opinion. The thing is not very difficult as far as these people are concerned, and I know they are deeply interested in it.

The CHAIRMAN: Are there any further questions?

Mr. MACNICOL: Would Mr. McLachlan not wish to comment on the statement Mr. Gillis has just made?

The WITNESS: I must say there is not much room for argument on a rock-fill. You certainly need a rock-fill to block that channel, and if you put it in without any current at all, assuming that there were no currents in the place at any time, you could not build it up on a slope that would be steeper than 5 horizontal and 4 vertical; and I do not think you could get along with less than 50 feet width to get a railway and a highway. I am sure you would have to have at least that. And it would have to be away above high tide; and even quarrying rock-fill, that anyway is going to cost you \$2 in place—we were never able to get it for less in connection with our national harbours, work in harbours like Saint John, Montreal and similar places where we have had rock-fills. Those generally cost \$2.25. Out of the Skeena river, where they are building a highway along the main line of the old Grand Trunk Pacific Railway, even for excavating the rock and dumping along the railway for the highway, \$2.35 is the contractor's cost per yard, so it does not matter whether you believe me or not, nobody can surely suggest that you can build that causeway for any sum like \$500,000. If somebody came along and argued with me that my estimate of eight should be six—well, there might be something to that—but if anybody came along and said it should be two rather than eight, I would certainly say he is crazy; I would say there was no possibility of his being right so far as I am concerned. I am quite certain that my estimate is not too high. On the other hand, when you prepare an estimate you have always got to be prepared to argue both ways—it is not too high or it is not too low. It is your shot at it after you have studied a dozen similar projects in different parts of the country. I know that contractors will often come along and tell you that they can make a rock-fill for \$1.75, but just ask them to bid on a job and their price will go up to \$2.25 every time.

*By Mr. MacNicol:*

Q. You would definitely discard the question of the tunnel?—A. Oh, yes, you cannot build a tunnel because you might get caught—you might start and go along fine and build a tunnel for \$300 or \$400 a foot and as it would be only four miles long, your estimate would be about \$8,000,000 to start with, and when you get out to the middle of the Gut you might run into a fault and strike water, and you would be too far down to use pneumatic methods and you would be stalled where you could go no further.

Q. You definitely rule out the tunnel?—A. Yes.

Q. What about the bridge?—A. The bridge? Nobody can get away from the fact that the Quebec bridge cost \$22,000,000 and the width of the channel at Quebec is not very different from the width at the Gut. As regards the depth, you have carried your pneumatic foundation 100 feet below water at Quebec, and we expect to meet rock at Canso at that depth. At the gut of Canso the deep water is wider than it is at Quebec; the piers at the Quebec bridge are 1,800 feet apart, and they are really on ground at low tide. The middle of the channel is 180 feet deep. The ground rises up very close to the water surface at the piers. You would have more masonry in your piers at Canso than you have at Quebec because the channel for 2,400 feet is over 100 feet deep and that means that if you build a cantilever as at Quebec, both piers are in water 100 feet deep and you are building in water flowing at four knots and there is all the ice that sweeps in and out in that strait. You have some job on your hands. These piers have to be enormous in order to resist the impact of those masses of ice, and although the shores are high and the rock is very near the surface, building a bridge is no easy job under those circumstances and it is going to cost money. I do not think you have to be an engineer to know that it is going to cost you just as much there as at Quebec, or pretty nearly, at least. So I think you can dismiss the idea that you can go across there for anything less than \$15,000,000 anyway.

Q. And how much would the causeway cost?—A. I say \$8,000,000. Somebody may say \$6,000,000. I add an additional \$4,000,000 for the lock, but I say that it depends on the size of the lock. You can cut that amount in half

by cutting the size of the lock in half. I think if I had to do it I would cut that lock down to small dimensions; I would use a lock 500 feet long by 60 feet wide. That is what we used in the Chignecto canal estimate. It would not pass all the boats, but it would pass 95 per cent of them, and the others could go around. Now, the lock the United States government built at the head of the Chicago drainage canal to prevent the flow of water from reversing where it entered the Chicago drainage canal cost \$2,700,000. That lock was 650 feet long and 80 feet wide and 30 feet from the floor to the coping—it was built for 22 feet of water.

Q. Right in the mouth of the river?—A. Yes. It cost \$2,700,000 or \$1.65 per cubic foot. The lock we built at St. Ours in 1927 or 1928 cost about \$1.65 per cubic foot. It was about 300 feet long and 45 feet wide.

Q. That is the lock?—A. Yes. I could give you dozens of locks that have been built all over the country and they all run around that. There is no question that the \$4,000,000 I gave you for that size of lock is right. However, it is up to you. The really sensible thing to do would be to have a smaller lock.

Q. If the matter were left to you which one of the three proposals would you choose?—A. The causeway, of course, with a lock 500 feet long and 60 feet wide, and I would arrange to give it, perhaps, 27 feet of depth at low tide. I imagine that project would cost about \$10,000,000, and I do not think you would get away for anything less. As far as Waddel, Hardisty & Co. are concerned, I know Mr. Waddel very well and they are a very fine firm and they have done a great deal of work, but still in estimating the building of a bridge across there at \$5,000,000—

Mr. GILLIS: That was 1906.

The WITNESS: Even in 1906 the engineers estimated the Quebec bridge at about \$8,000,000, and the first bridge fell down in 1908 or 1909 and they built the second bridge, and perhaps they were as optimistic as the people who built the bridge in 1906. There were a lot of optimistic people in those days.

Mr. MATTHEWS: Let us hear Mr. Fairweather now because some of us may have to leave the room later.

*By Mr. Purdy:*

Q. You mentioned ice conditions in connection with the suggested bridge. You do not say what the ice conditions might be if a causeway were built.—A. There would be no ice conditions in the causeway if you block the channel; it would be an inlet of the ocean. There will be no motion of any mass of ice toward the causeway or away from it; there might be a little rise or fall and the stone might be a little displaced, but it should not be any more costly to maintain than any of the small breakwaters around those small harbours. I designed the breakwaters that were built at Tormentine and Borden in 1913; they were built the way I planned them, and I do not think anything has been spent on repairing them, and they are out in the straits.

Q. I am not speaking of damage; what would happen if you blocked that outlet for the ice?—A. That ice would stay in the straits and melt away.

Q. You would turn Prince Edward Island into a Newfoundland?—A. Oh, no. The effect of stopping the interchange of water would not be very great. You have the flood of 18 billion cubic feet of water coming in and out. I looked up the average temperatures at Guysboro, at Antigonish, at Charlottetown and at Bathurst, and the record shows that the effect of this causeway would be to make the territory around Antigonish colder in winter and warmer in summer. That is what I say would be the effect.

Mr. MACNICOL: The mere fact that the water is not moving would result in that?

*By Mr. Purdy:*

Q. Surely the prevailing winds through that gut in the spring would have some effect in moving ice away from the coast of Prince Edward Island and Nova Scotia—A. It would be no different from Country Harbour. That would be an inlet of the sea.

Q. Suppose you blocked all the ice in Country Harbour, don't you suppose that would make a later summer in that section?—A. Oh, I do not know whether the temperature at the end of Country Harbour is any different from that of Canso or any other place; I do not think so. As the tide rises and falls and flows in and out no doubt the ice would flow out after a little while. It certainly would not be moving at a terrific rate as now, but it would move off after the weather got warm.

Q. When there is an easterly wind and the ice is blocking in Sydney harbour the season is held back by two or three weeks every year, and when the prevailing winds are westerly the wind carries the ice away?—A. I do not doubt that it will. All I can say is that the average temperatures are clearly shown there now, and that would simply be accentuated.

Q. Is it not possible that it might have some effect on the climatic conditions?—A. Just a very little.

*By Mr. McDonald:*

Q. At the present time does the strait freeze over solidly in the winter time or is there floating ice?—A. You people from down there would know that.

Q. I am not from down there.—A. Well, you people from down there know exactly what happens in the winter time.

*By Mr. Black:*

Q. What would be the cost of maintaining a bridge, taking as a comparison the Quebec bridge in relation to a causeway? You say that the maintenance cost of the causeway would be almost negligible whereas that of the bridge would be quite considerable, do you not?—A. I forget now, but I think Mr. Fairweather will be able to tell you what it costs to maintain the Quebec bridge. For instance, the Montreal bridge costs quite a lot for maintenance every year. It has to be painted every five or six years, and it consumes nearly all of the revenue that they are getting from it.

*By Mr. McDonald:*

Q. A portion of the cost of maintenance of the Quebec bridge is paid by the provincial government, is it not?—A. Just a wee little bit; I forget the figure.

Q. When the passageway was built over the bridge the provincial government took over certain charges?—A. Those were only considered as being equal to the increased maintenance—the ties or something; those charges bore no relation to the cost of the bridge or to the cost of maintaining the main structure. It is very little that they are paying.

Q. I know that they bore a large share of the cost of building the highways across the bridge.—A. They paid the whole thing—that is, the approaches; they did not pay anything toward the foundation, nothing to speak of.

Q. They paid some of the maintenance, too.

*By Mr. MacNicol:*

Q. Suppose the causeway were built what would be the economic result with regard to the moving of more coal?—A. Mr. Fairweather is going to deal with that.

MR. S. W. FAIRWEATHER, Chief of the Research and Development branch of the Canadian National Railways, Called.

**THE WITNESS:** Mr. Chairman, ladies and gentlemen, I have not prepared any brief on this subject, but I am here representing the Canadian National Railways to answer any questions which may arise with regard to this project or to allied matters. The Canadian National Railways would, of course, be very happy to see an improvement in transportation across the strait of Canso. The present operation by ferry is certainly more expensive from an operating standpoint and more inconvenient than would be the case if a causeway or a bridge or a tunnel were available for the use of the railway. Of course, in a world in which the results of our operations are judged by an income account, we would have to qualify our views with regard to any facility which might be provided in accordance with the amounts of expense which we were expected to bear for the use of it. For instance, if we were expected to provide those facilities from the coffers of the Canadian National Railways the inexorable laws of economics would force us to the conclusion that we could not afford it because the cost of interest and depreciation and maintenance of the facilities would be higher than our present costs. That, I think, just about sums up the position, particularly of the Canadian National Railways; but since you gentleman should have the benefit of the thought which we have given to the questions of transportation in that section of Canada I would like to develop, very briefly, the elements that are present. I think you have to make a distinction between war economy and peace-time economy. The facilities which are available at any time must be judged by two standards: first, their capacity to do the work, and second, the convenience with which that can be accomplished; and as a corollary to that the question of economics as to what is cheapest. Now, at the present time our traffic on main lines down in Nova Scotia is very heavy, and that has been brought about by two causes: the first is due to the fact that the war has stimulated the industrial productivity of the country and everything is being done on a larger scale, but it has also been largely influenced by a dislocation of water transport. The result is that the railways of Canada—and for that matter of the United States—are carrying large quantities of freight which would normally move by water. That is peculiarly the case with regard to Cape Breton. Railways can do a great deal in the way of transportation. They are, by long odds, the cheapest means of transporting freight on land. But there is one place where a railway has to admit it is licked, and that is when it comes up against water transport. You just cannot haul freight by rail in competition with water transport and get away with it. You get a beautiful illustration of that in coal moving from the Sydneys up to this market here, to the St. Lawrence valley and the industrial sections of Canada that are reached via the St. Lawrence river. The advantage of water transportation over rail transportation is so marked that the Canadian National Railways, which is the largest coal consumer in Canada, brings its own coal for its use in its own locomotives, in normal times, by water up here rather than use its own line of railway where it would not have to charge itself any freight rates at all, but where it would be met purely with the cost, and at that, the out-of-pocket cost, of transporting it by rail. We found that it is not economical to try to handle coal by rail against water competition. We have exactly the same thing in another case. The coal which we burn in this section of Canada here—that is, the section of western Ontario and extending to the Manitoba boundary—we found much more economical to bring by water up to Fort William, rather than to attempt to haul it by rail. That is just plain transportation economics.

What happened when war broke out, or what was the condition just before war broke out? We found ourselves as a railway hauling on this line from Sydney to the Strait of Canso and thence onward a volume of miscellaneous traffic—some coal, some steel, the miscellaneous produce that goes with industry, and the passenger, mail, baggage and express—and the whole amounted to a not very great figure, not nearly as much as we would like. The reason for that condition was that this intensely industrial area here at Cape Breton is

especially favoured in the matter of water transportation to its principal markets, and it is very fortunate that that is so. If there is any thought by anyone that the construction of a low-grade line to the Sydneys would result in coal moving by rail from the Sydneys to the markets in the St. Lawrence valley, I am afraid he would be disappointed, in fact, I know he would be disappointed. It would be impossible for the railway to quote a rate from which it could pay its operating expenses and compete with water transport in peacetime.

But when shipping by the St. Lawrence became unavailable, and when the impetus of the war on industrial production was felt, traffic on this line from Sydney to the Strait of Canso and thence to Truro increased enormously, and it was something which the Canadian National Railways was very much concerned with. We gave serious consideration to the whole transport problem, and we improved our facilities as far as it was feasible to do in the limited time that he had available, and within the limit of the materials that were available. Of course, in wartime you always have to adjust what you are going to do to what you have available to do it with. So we improved that line in question by extending passing sidings, by improving the yard facilities, and generally doing such things as it was within our power to do. But when we came to the problem of how this great volume of coal which was previously moving by water through the St. Lawrence was to be moved by rail, and when you took that in conjunction with the enormous increase in traffic which has taken place down to a certain eastern port, it just got to a point where one had to come to the conclusion that some alternative means would have to be secured if that tonnage were going to move, because the existing lines could not do it. Those alternate means have consisted partly of a diversion of markets so that we could get the coal from different markets, and partly from the provision of a by-pass which could be built quickly. As regards diversion of markets, Nova Scotia coal used to find a market as far west as Toronto or even west of that; is was subsidized, it is true, but nevertheless it was moving by water to Montreal and then by rail to points west. The railway used that coal for its own purposes pretty well in the Lower St. Lawrence valley, part of the Ottawa valley, and went as far west on the N.T.R.—I think, as Cochrane. When it became evident that the coal could not move—and I may say it was not produced, as far as that goes, to make it available for movement; but even if it had been produced, it could not have moved by the existing facilities—a change took place and United States coal came in in greater volume and has replaced this coal from Sydney; and actually the Canadian National moves United States' coal down to points in the maritimes because we cannot get coal enough from Sydney.

What has happened at the Sydneys is, apart from their production problems, that there has been a tremendous increase in war uses for their coal for more important purposes, and there has been that diversion of markets. But realizing that we were on very unsafe grounds, and to keep open a path of moving large quantities of coal from the Sydneys in wartime, and as a wartime measure, a transfer point was installed at a point called Point du Chene, something which could be done in a hurry; and that is the thing you have to think about in wartime. A plant was established there. Boats are loaded with coal at the Sydneys, come down through the Bras d'Or lakes, pass through St. Peter's canal that Mr. McLachlan mentioned, go through the Strait of Canso and go up the Northumberland straits to Point du Chene where they are unloaded at a coal dock and where the Canadian National Railways can commence the rail haul. The reason for that is this—and I do not think that what I am saying now should be repeated generally.

*By Mr. MacNicol:*

Q. Would you like it to be left off the record?—A. I think this part of it should be.

The DEPUTY CHAIRMAN: Very well. It will not appear in the record.  
(Statement followed off the record.)

The WITNESS: The essential requirements of Nova Scotia in wartime, if taken together with the coal moving from Sydney in the pre-war volume, would produce a situation where congestion was bound to occur. So as an alternative we put this by-pass in from Sydney to Point du Chene. That has the advantage that it by-passed that single track section of line.

*By Mr. MacNicol:*

Q. It eliminates the ferrying across Canso?—A. It eliminates the Canso bottleneck. It eliminates also the congestion that would occur on the single track line between Moncton and Truro; and it was practical, because we could build it in a few months. As a matter of fact, from the time we got permission to build it until the time it was in operation was only a matter of eight of nine weeks, or a little better than that; certainly not more than ten. It was a hurry-up affair. We took towers that were previously in use on the St. Lawrence and we took a power plant from another location, and we rushed them down to Point du Chene and got the thing going. That is one of those things that is not highly publicized, but it is capable of doing a good piece of work. It has a capacity to handle, I would say, perhaps one and a half million tons of coal in a year, which is an appreciable portion of what was previously moving up the St. Lawrence river. Of course, I would not have you think that we have not any capacity across the Straits of Canso. We have, and we can handle quite a lot of traffic across there.

In a memorandum which was presented by one of the members here, it was pointed out that the Strait of Canso itself was not the complete answer. Mention was made of the necessity of building a line of railway from Sydney through to Moncton. We have been indulging in estimates around here, and I do not mind making a few myself. The line of railway from Sydney to Mulgrave—

*By Mrs. Nielsen:*

Q. Would you show us where that is on the map?—A. From Sydney to Point Tupper, rather. That line of railway, I think, partly by grade line revision and partly by new construction, would cost \$6,000,000, was it not, Mr. Gibault?

*By Mr. MacNicol:*

Q. That has already been spent?—A. Oh, no. That is what would be required.

Mr. GIBAULT: Six and a half million, yes.

The WITNESS: Then when you get to Point Tupper, you would come against the ferry operations, and Mr. McLachlan has spoken of that, his estimate being somewhere around \$10,000,000 or \$12,000,000 if you wanted a causeway. Then you would still have the problem of getting to a point near Truro, because the line of railway from Mulgrave to Truro, let us say, or New Glasgow, is a line that was built in the early days when railroading was not as well developed as it is now. It is not a good line. It is expensive to haul over it, and you cannot, unfortunately, improve it because the people who built it just went over the tops of the hills. To build a line to solve that difficulty would really have to go not over the hills, but around them. That would mean, in all likelihood, you would come down through Guysborough and go through a place called Sunnybrae, and rejoin the main line at a place called Ferrona Junction. That line has been partly built, as a matter of

fact, under the name of the Guysborough branch line. But to complete it, it would cost another \$8,000,000. Then you would be right up against the bottleneck to which I previously have referred, namely the single track line between Moncton and Truro.

*By Mr. MacNicol:*

Q. That is across the marshes, is it?—A. Well, it is across the marshes it is also across the Cobequid mountains. There is only one practical solution for it, and that is to build another line. That line would cost—we estimated it in 1939—\$10,000,000.

*By Mr. Ross (Calgary):*

Q. About what distance is that? A. That is about 125 miles, and would cost about \$10,000,000. Some people estimate that a modern railway costs \$50,000 a mile, but that is just not so. So when you add the thing up you will see that, in order to get this system—and it would be a magnificent system—you would have a total, taking my estimate along with Mr. McLachlan's, of about \$35,000,000, and it would be a program of work which would probably extend over three years. You would not get any relief during those three years. As a matter of fact, all the transportation problems would be increased because you would be not only transporting or trying to transport traffic on your existing line but you would also have the congestion arising out of transporting your construction materials for the line you were going to build.

*By Mr. MacNicol:*

Q. How many thousand men would be employed? A. We did make some estimate of that. It depends on how fast you wanted to do it. To spread over a three-year period, it would be say, \$12,000,000 a year. Of course, you also get involved there in what is direct and remote labour.

Q. Yes. A. All of the \$12,000,000 or all of the \$35,000,000 is really, in an economic sense, labour at some time or other, whether it occurred now or whether it occurred previously. If it occurred previously, you call it capital; that is, machinery or something of that character. But it is all labour in one sense. But with regard to the direct labour, on the site, the visible labour that you would see, setting aside the labour in the steel mills rolling the steel rails—

Q. Just double what you have stated and you would get the total. A. That is quite right. We usually think of it in terms of man hours. The direct labour would amount to about \$6,000,000 a year. There would be about 7,000 men directly employed for three years.

Q. That would be really equivalent to seven regiments? A. Something like that.

Q. Our purpose here is to find employment, to put men to work after the war where they will give a return to the country and be working instead of receiving the dole. A. Yes.

Q. We want to eliminate the dole. We want to give them wages. A. I was coming to that, sir. We were in this dilemma: we would like to have these facilities on account of the wartime traffic, because with the wartime traffic, that would be highly desirable. But if we attempted to build them in wartime, we found ourselves up against an impossibility.

Q. You could not do it. A. The other horn of the dilemma is this: if we build them in peacetime, they are not needed, you see.

*By Mr. Black:*

Q. We should have built them in peacetime and had them ready for an emergency. A. If one wants to plan his economy for war, I would agree with you. But, of course, we have ordinarily planned our economy for peace. And

if you expect the Canadian National Railways, for instance, to operate as efficiently as they can, then what could we do with \$35,000,000 of facilities and traffic that would be only a third of the present volume of traffic? That is, roughly, the problem.

*By Mr. Purdy:*

Q. At the completion of that, if you had an up-to-date railroad, how many of the present employees would you throw out of work? A. Of course, you would throw quite a number out. For instance—of course one hates to think of these things in this way—there is a very nice little community down in Point Tupper and Mulgrave that has its living and its being out of these car ferries. We distribute a payroll down there that has been estimated at half a million dollars a year. That is a little high, but still we distribute quite a payroll.

Q. And you reduce your road crews in that section? A. Yes.

Q. And operating crews? A. Yes. Everything a railroader does to improve the efficiency of his property puts men out of work.

*By Mr. Black:*

Q. It appears to me that the estimate is not very high from Mulgrave to Sunnybrae or New Glasgow, having regard to the very large expenditures already made. The road bed is completed.—A. There is a very simple explanation of the difference. The Guysborough line was built as a branch line and provided for grades, I think, of  $1\frac{1}{4}$  per cent. The line I am talking about is a line that has only a six-tenths grade, and consequently a lot of that construction would be of very little value on the line that we are now talking about; because if you built it there on the basis of a branch line, you would be no better off than with the line you have. I admit if you were content with a branch line, the cost would not be \$8,000,000.

Q. I think you are right in that. But on the other hand, the standards of that branch line are much better than the regular road from New Glasgow to Mulgrave.—A. Admittedly so.

Q. With regard to curves and grades.—A. But then, of course, you must also remember this. The grading is only complete for part of the way. Another thing is that the line from Guysborough to Mulgrave has not even been surveyed, at least not lately. But I am like Mr. McLachlan; I stand by my estimates.

Q. That is practically complete, is it not?—A. Oh yes, we have surveys. We gave this problem actual study. We have complete location plans of the line from Painsec Junction to a junction with the main line between New Glasgow and Truro. That is all ready to go ahead with.

Q. I mean, that would be a very good railroad?—A. That would be a very excellent line indeed, and we would be very, very happy to have it.

Q. I would think that line should be completed, even as a peace-time project.—A. Of course, the difficulty there is this, you cannot abandon your existing line; and when you figure it out in economics the amount you would save—and you would save money on the operation of the new line for through freight and through passenger traffic—is not enough to allow you to carry the maintenance of the old line and the minimum traffic that you would have there on it, because it would not pay interest and depreciation on your new plant and equipment. Again, I want to make it plain in talking to that point, I am speaking as one who is held responsible for the costs, you see. You can do a great deal if the funds for these various things are not charged against the use of them, but if you charge the cost against the use, then my training as an engineer forces me to say, when there is going to be a red figure at the end.

*By Mr. Purdy:*

Q. You are basing your remarks on the theory that with increased facilities and lower operation costs of transportation and so on, there would not be any

new industries developed in that district. Have you any reason to say that there might not be considerable development of industries in the eastern part of Nova Scotia which would give you a greater volume of freight and so on?—A. Well, frankly, I come from the Maritimes—

Mr. PURDY: All good men do; or nearly all.

The WITNESS: —and I have always been a believer in the future of the Maritimes, and I know that they have large undeveloped natural resources; and I can also give evidence that good and cheap transportation is an essential factor in the development of any country, and I know of no means as efficient as a railway for furthering that transportation on land. I would certainly look to increased use of the natural resources of Nova Scotia. But I also know this, as an engineer, that the demonstrated capacity that we have for handling traffic in this wartime emergency has indicated that we could handle a very great increase in industrial activity with our existing lines.

Q. In peace time?—A. In peace time.

Q. That must be a very expensive part of the line to operate with your double-headers and limited carrying capacity?—A. It is certainly not cheap. But again I come to this, that the line from Sydney to Tupper does not handle normally in peace time, the class of traffic in sufficient volume to make it worthwhile doing very much better about it. It is a question of bearing in mind capital expenditure against volume of traffic. We would be very, very glad to see that line improved, and I want to leave that thought very clearly. But when I am asked in my capacity as chief of research and development, is the railway justified in spending a large amount of capital which we are going to be accountable for—that is another matter.

Mr. MACNICOL: In other words, I can see by the report put in by Mr. McLachlan and yourself that the real question is, have you any adequate returns to support a recommendation that consideration should be given to such and such matters down there, that they should be finished.

Mr. PURDY: I do not think—

Mr. MACNICOL: Now, just a minute, if you don't mind; another thing, as I see it, is that if these are done a number of permanent jobs down there will also be done.

The CHAIRMAN: It is the cold aspect of dollars and cents as it relates to the situation.

The WITNESS: Everything you tackle in the engineering sense comes out to that same answer. I have spent all my life putting men out of work; and the only thing we can do about it and the only way you can reconcile your mind to it, is that the fecundity of Canadian intelligence and the availability of Canadian resources is such that it is good economics to build. That is the only way I can reconcile it. But throughout my lifetime it has been my job to throw people out of work; to put it just as coldly as that.

Mrs. NIELSEN: It is very strange then that you should be appearing before this committee where we are supposed to be making a study to find work for people.

The WITNESS: That is why I have been very careful to qualify my evidence, you see. I mean, just as an engineer, I am put in a very curious position; I am always asked if it is reducing costs for us, and if it does that for us, you see, it puts somebody out of work so far as we are concerned.

*By Mr. Purdy:*

Q. Would you say that your experience has shown that increased transportation facilities have generally operated to increased industrial development in areas such as this?—A. This is getting to be a very interesting discussion, because

we are getting off now into the field of economic philosophy—and I know of no instrument other than the railway that is capable of making the natural resources of Canada available to the markets of the world. There is no other. We are geographically a country that needs railways. We cannot get along without them. Now, I have made a study to see to what extent railway capital in this country had increased the national wealth. You spend a dollar of railway capital and what do you get in national wealth? And this is the answer: that in western Canada for every dollar of capital, whether it was in the form of a subsidy or whether it was in the form of free venture capital that went into railway construction, the national wealth of the nation increased by about \$9. And for every dollar of railway capital that was expended in eastern Canada I think the figure is about somewhere around—I am speaking from memory—I think it was in the neighbourhood of \$12 to \$13. I made a similar study for the United States and I found in their case it was about \$17; but, of course, they are further along than we are industrially. Now, there might be some slight degree of fallacy in my reasoning because I assumed that none of this national wealth could have occurred without the medium of the railway. I think that is probably true of all of that part of the continent that has not got water transportation available; but in eastern Canada and the extreme west, of course, you have water transportation and you get into a situation where you hardly know whether you are dealing with water or rail transportation, they are in combination; and, of course, they are in combination literally all over the world. But I do think it is a striking fact that we know that had there been no railways—this is true in Canada and the United States—they could not have developed industrially the way they have. And, when you relate the increase in national wealth to the investment in railway facilities, which was a primary necessity at least, you find these results. And now, this has a bearing on your question, but you see you have the law of diminishing returns coming in. The first million dollars that you spend is very profitable from the standpoint of the development of the country, and then you spend another million and it is less profitable and each additional million that you spend is less profitable. I certainly would not say if you spent money to improve railways for transportation that you would not get better development; but I could not say definitely that a railway already being there that it would be proportionate to the average. I have tried to answer you as honestly as I can.

Q. But you would say that the developments being asked for are quite advisable if the money could be found?—A. Oh, yes.

Q. And the volume that there would be quite a substantial industrial development following the increased transportation facilities?—A. Well, that is rather a leading question.

Q. I mean, sooner or later?—A. That element does come into it, but I cannot forget my training as an engineer.

*By Mr. Black:*

Q. I would like a little further explanation on that Sunny Brae-Guysboro railway; can you tell the committee what the total expenditure has been on that railroad? Practically none of it is in use now.—A. You mean, to date?

Q. Yes.—A. I do not think I have that available. Perhaps Mr. Gibault could tell us. I could not give it to you off hand.

MR. GIBAULT: I think we spent \$2,500,000.

THE WITNESS: That is the figure I had in my mind.

MR. BLACK: My impression was that it was considerably more than that.

THE WITNESS: I think it is about \$2,500,000.

MR. MACNICOL: And no returns whatever from that.

THE WITNESS: Oh no, no; it is just lying there.

Mr. PURDY: You could use a portion of it.

The WITNESS: I know, but there is very little there being used.

Mr. PURDY: I have seen trains coming out there with twenty cars of freight on them; there must be something there for them to bring out.

The WITNESS: Broadly speaking, we do not get much.

*By Mr. Purdy:*

Q. And your estimate after survey is that it would take about \$8,000,000 to complete that?—A. If you wish to build that line on a .6 grade into Mulgrave it would cost about \$8,000,000.

*By Mr. Gillis:*

Q. Why was it started in the first place if it was never used?—A. Now, you are getting into another field altogether; I am not going to answer that.

Mr. PURDY: Would you suggest, Mr. Gillis, by attempting to provide down in Guysboro county some of the facilities that you have been looking for for years is political?

Mr. GILLIS: I asked him why \$2,500,000 was spent on it and it was never used.

Mr. PURDY: You were advocating a course along those lines the other day and now you say that the undertaking of this was just political expediency.

Mr. GILLIS: I asked quite a natural question. They spent \$2,500,000 on it and it was never used. Why was it spent in the first place?

*By Mr. Gillis:*

Q. Why did you not continue it so it would have been of some use?—A. All I can say is we have a lot of uncompleted branch lines, not only in Nova Scotia, construction of which was interrupted by the great depression and which are still uncompleted; that is the answer.

*By Mr. MacKenzie:*

Q. At what time was that piece of road built?—A. The Guysboro line?

Q. Yes.—A. It was our last branch line programme, in 1928 or 1929.

Q. It is not part of the old Intercolonial?—A. No.

*By Mr. Purdy:*

Q. When was the contract cancelled?—A. I could not say that.

Q. In 1930?—A. In the depression; I cannot answer that.

The DEPUTY CHAIRMAN: Have you any further observations to make or are there any further questions to be asked of Mr. Fairweather?

Mr. GILLIS: I should like to say this: we are about to adjourn. Mr. Fairweather made one very valuable contribution to the committee this morning. As Mrs. Nielsen pointed out, it is the duty of this committee to find work in the post-war period. Mr. Fairweather pointed out that the project we have been discussing; that is, the causeway plus the extension of the railroad into Moncton, could employ 7,000 men for approximately three years. It is important for the committee to remember that. I do not agree with him that we perhaps won't need that when the war is over. I think that is short-sighted vision if this is a necessary project, and I think it is not only for the immediate purpose that it can be used for, but it is also necessary in the post-war period. I hope that the Canadian people will have something to say about that.

Mr. Fairweather did not advance a very good argument this morning for the future of the Canadian National Railways in Canada when he made the

point as an economist and engineer—and I appreciate his position; he is an employee of the Canadian National Railways—that it is cheaper and more economical to handle all of our materials by water where it is possible. I have in mind that Canada to-day is building up quite a merchant fleet, and if that argument is valid the economical thing for the Canadian people to do when the war is over is to expand that fleet and utilize it around Canada for transportation purposes. I do not visualize that happening because the argument that he advanced can be answered in this way: from the viewpoint of the passenger, the people who are just travelling on the road, I think the future in that direction is in the air, and if we developed or used the ships we are building now along the lines advanced by Mr. Fairweather, I see the railroads passing right out of the picture in the future, so far as the movement of freight and the transportation of people are concerned. I do not expect that that will happen, though. What I am concerned with this morning is the building of this causeway. I consider it as an immediate war project, and assuming it would take a year or two years to build—I know a representative of the engineering company of Waddell & Hardesty, Mr. Hardesty, who was over here to see me, claimed they could build that causeway in a year. The American people are interested in it because it constitutes a bottleneck for them in the transportation of certain materials to Newfoundland. Mr. Hardesty explained to me that he thought he could get priority on steel in the United States to go ahead with the project.

This matter was advocated in the house three years ago. It was advocated the next year and the next year as a definite war project, and had we started on it at the time it was first raised the thing would have been completed now and we would have been using it while we are still talking about it. I definitely think that as far as the extension of the railway is concerned this is a matter that cannot be handled mutually, perhaps. I believe the removal of the bottleneck across the strait is something that is absolutely necessary. I cannot see that the economics of the question is a barrier when the Canadian government in Sydney alone has subsidized industry in expanding them for war purposes to the extent of approximately \$11,000,000. That money has been invested there. They have put equipment in plants there that I visualize will be used in the future in the interests of Canada, and if the transportation facilities on that island remain as they are then that investment, in my opinion, is practically wasted. I agree with Mr. Purdy that perhaps the whole development of industry in the maritime provinces and in that end of the country particularly is being retarded because of transportation facilities. High freight rates and all that are always an argument against the investment of money for the creation of small industries and so forth that would take up the slack of unemployment. I think the project we are talking about now is definitely an investment that this country should make in the interests of the post-war era. I refer now to the building of the causeway and the straightening of the road from Point Tupper to Sydney. That road is terrible. You just get bumped all over the place. While you have made a lot of improvements on the Moncton end of the road down to Truro, there have been very little improvements on the other end to which I refer, as far as the comfort of anyone who has to ride on it; and, of course, I can understand that.

With regard to your presentation to the committee that you cannot compete with water transport particularly in coal I cannot see that follows at all for this reason, that coal shipments to Noranda, for example, have for the past several years been made directly by rail. All of the Dominion Coal Company coal shipped to Noranda was shipped direct by rail. For four months of the year the St. Lawrence river is frozen and the coal has to be banked and the banking of the coal adds considerably to the cost of the fuel and it is not available to the people who want it. I think that project of straightening that road by

running it through to Moncton is definitely an investment that is necessary for that end of the country where you could ship or transport all your coal by rail. I think anyone who is interested in the future of the railroads should be definitely concerned about that project in the face of the developing situation with respect to transport by water, by air, and all of those things. I think the facilities will have to be improved to maintain your position in the field of transportation in the future.

I am very pleased to be here this morning. I cannot agree with everything the witness has said. I think in terms of getting something done. I am not particular about the cost. I think that any investment that can be made with respect to transportation development of our resources and so forth is definitely a contribution on the part of this generation to the generation that is coming behind us. I think that is the basis on which we should work. As to the views expressed by Mr. Fairweather this morning in the past his job has been to throw men out of work. That has been the system under which we are living.

Mr. MACNICOL: He did not mean it that way.

The DEPUTY CHAIRMAN: He did not mean it that way.

Mr. GILLIS: Technological development and improvements necessarily displace men. There is no doubt about that to my mind but I am hopeful that in the future instead of thinking in terms of economics we are going to think in terms of things and people, what is good for society itself, and that Mr. Fairweather's job in the future will be much better than it is now. He will be thinking in terms of service to the Canadian people instead of dollars and cents on the right side of the ledger.

The DEPUTY CHAIRMAN: Has anyone else any questions to ask Mr. Fairweather or Mr. McLachlan?

*By Mr. MacNicol:*

Q. Suppose we forget all about the causeway at the moment and only think of improvement in the railway as has been suggested by a number of members; how many jobs would that give? For instance, the railway from Point Tupper to Sydney and the railway from Mulgrave to Truro; how many jobs would that provide? You can hardly expect the railway to put up the money for it. I imagine that would be the duty of the government to put up the money for anything like that by way of providing jobs to men who are going to be thrown out of the army when the war is over. How many men would the railway itself take?—A. If you leave the causeway out of the figures that have been presented to-day and do the rest of the work that has been mentioned I would say it would give about 5,000 men employment for about three years directly on the work.

*By Mr. Bertrand:*

Q. That is up to Moncton?—A. This would visualize an improved railway from Sydney to Point Tupper and then an improved railway from Mulgrave to Truro and a new railway from Truro to Moncton. Take that altogether and that would be about twenty-five odd million dollars. I would say that the direct employment would be about 5,000 men for three years and then back of that again—

Mr. MACNICOL: There would be another 5,000.

The WITNESS: There would be another 5,000 employed in factories and one thing and another.

*By Mr. Black:*

Q. Here is a figure that I would like you to give us. Suppose it costs \$1 under existing conditions to move freight over that territory; what would it cost—not taking the cost of capital expenditure—to move that same freight with improved railway facilities, modern railway facilities?—A. I would hesitate to give a categorical answer at this time. There is no doubt there would be a substantial reduction.

Q. It would be one-third what it is to-day?—A. Oh no, you could not reduce it that much.

Q. Pretty nearly that; it takes two locomotives to move eighteen cars to-day.—A. Of course, you must not concentrate on the locomotives. You still have got your cars. Railway costs partly follow the car mile, and of course that would not be affected, and they partly follow the locomotive mile which would be affected. I would be inclined to say that your operating expenses might possibly be reduced—I find myself in this confused position that you have got to maintain two lines of railway—

Q. No, I am not asking what the loss would be.—A. It is clear we are talking now purely of the operating economy on the line in question?

Q. Yes, if it costs \$1 to-day what would it cost with new facilities?—A. I would say probably about 75 cents to 80 cents.

Q. I think you are entirely too high but you are an economist. I would say 50 cents, anyway.

Mr. BERTRAND: 15 to 20 per cent reduction.

The WITNESS: I would say about 20 per cent. I might give you just a shade more, but not much more.

Mr. MacNICOL: Mr. Chairman, I for one, have listened with much interest to the two engineers. I like listening to engineers because they generally build on facts. They presented us with a lot of information that we can study very carefully; and perhaps later on, after we have had an opportunity to make a study, we may have them back again to elaborate on what they have said and answer any further questions that we might have to ask. I would move a vote of thanks to these two gentlemen.

The DEPUTY CHAIRMAN: I think Mr. MacNicol has pretty well expressed the sentiments of the committee. We appreciate very much you gentlemen having come to us this morning. You have given us a lot of information. Some of it is known by those members who come from that particular area, but it was very interesting to those of us who live in remote parts of Canada and on the prairies. We thank you both very much for your presence here.

On Tuesday next the committee on social security will meet in the railway room at 10.45 o'clock. They have arranged for the attendance of Sir William Beveridge, who will speak to their committee. Mr. Macmillan, the chairman of that committee, has been good enough to extend to our committee an invitation to be present. You will receive notice between now and then. It is suggested that the members of our committee bring that notice along with them and present it at the door, which will entitle them to seats that we hope will be reserved for the members of both the social security committee and the committee on reconstruction. It is also suggested that some of our members may wish to ask Sir William Beveridge a question or two. In fairness to our guest speaker, it is thought these questions should be presented in writing and delivered to our chairman, Mr. Turgeon, not later than Monday, so that notice of these questions can be given to Sir William. The questions should be limited in number and in length.

The committee adjourned at 1.05 p.m., to meet again on Tuesday, May 25, at 11 a.m.















v. Doc-  
an  
Com  
R

Reconstruction and Re-establishment,  
Office on, 1943/44

SESSION 1943

HOUSE OF COMMONS

( SPECIAL COMMITTEE )

ON

# RECONSTRUCTION AND RE-ESTABLISHMENT

In joint session with the Special Committee on Social Security  
and the Senate Committee on Re-Establishment  
and Social Security

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 16

TUESDAY, MAY 25, 1943

WITNESS:

Sir William Beveridge.

OTTAWA  
EDMOND CLOUTIER  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1943





## MINUTES OF PROCEEDINGS

TUESDAY, May 25, 1943.

The Special Committee on Reconstruction and Re-establishment met jointly this day with the Special Committee on Social Security and the Senate Committee on Re-establishment and Social Security, at 10.45 a.m. Hon. Cyrus Macmillan, Chairman of the House of Commons Special Committee on Social Security, presided.

The following members were present: Messrs. Bence, Black (*Cumberland*), Castleden, Eudes, Gillis, Harris (*Danforth*), Jean, MacKenzie (*Neebawa*), Mackenzie (*Vancouver Centre*), McDonald (*Pontiac*), McKinnon (*Kenora-Rainy River*), McNiven, Marshall, Martin, Matthews, Mitchell, Nielsen (*Mrs.*), Ross (*Calgary East*), Ross (*Middlesex East*), Sanderson, Turgeon.

The Chairman introduced Sir William Beveridge and Lady Beveridge who accompanied him.

Sir William Beveridge addressed the Committees and answered numerous questions.

Lady Beveridge was asked to speak and briefly addressed the Committee.

Senator Lambert, Chairman of the Senate Committee on Re-establishment and Social Security, on behalf of the three Committees, suitably thanked Sir William and Lady Beveridge for their kindness in coming here and addressing the Committees.

Mr. J. T. Turgeon, Chairman of the House of Commons Committee on Reconstruction and Re-establishment, also expressed the Committee's appreciation. Sir William briefly replied.

The Committee adjourned at 12.20 p.m., to meet again on Thursday, May 27th, at 11 o'clock a.m.

J. P. DOYLE,  
*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

May 25, 1943.

The Special Committee on Reconstruction and Re-establishment met in joint session with the Special Committee on Social Security and the Senate Committee on Re-establishment and Social Security this day at 10.45 a.m. The Hon. Cyrus Macmillan, Chairman of the House of Commons Committee on Social Security, presided.

The CHAIRMAN: Three committees, the Senate Committee on Reconstruction with an auxiliary Committee on Social Security, the House of Commons Committee on Reconstruction and the House of Commons Committee on Social Security are meeting this morning in joint session. We are to have the honour and the high privilege of hearing Sir William Beveridge, author of the notable report which he prepared for the British government. Sir William has given the greater part of his illustrious career to a study of welfare problems, and plans for the establishment of health and greater happiness for all mankind.

May I say to Sir William on your behalf how deeply we appreciate his presence here to-day, when he has interrupted what otherwise should be a necessary holiday, to give us the benefit of his experienced advice? We extend to him and to Lady Beveridge warm Canadian welcome.

It is my honour and pleasure to present to you Sir William Beveridge.

SIR WILLIAM BEVERIDGE: Dr. Macmillan, Senator Lambert, Mr. Turgeon, ladies and gentlemen, words fail me to say how much my wife and I appreciate the warmth of the Canadian welcome that we have had already here to-day.

We were told that we should like coming to Canada. We therefore hurried to come to Canada as soon as possible, as soon as we had fulfilled our necessary duties of courtesy to our first hosts in the United States.

I only wish that we could spend all our time in Canada and still have time left over to go back to other parts. We have been immensely happy in the few hours we have been here, and when I have got over the next half-hour I know I shall be very happy even in this room. Let me get over that next half-hour and talk to you and then invite you, if you care to, to ask questions of me.

I am particularly delighted to have the opportunity of addressing not one committee on social security, but three committees, and one of them which deals not only with social security but with reconstruction generally; because the point that I would most want to emphasize, is that social security or social insurance, which is the subject of the report which I made to His Majesty's Government in Britain six months ago, is only part and should be treated only as part of comprehensive program of social progress, designed to make after this war a new Britain. I use the term "new Britain" as summing up all that we in Britain desire. We do not want a country other than Britain, we are very fond and proud of the Britain that we have known, but we do not want that Britain to be exactly like the Britain that has been in the past. It wants to be a new Britain. Sometimes when we are feeling rather discontented we emphasize the "new" more often than we emphasize the "Britain". Perhaps one party in politics emphasizes the "new" and another emphasizes the "Britain"; but all of them agree upon the "new Britain" as something the same and at the same time not just the same as we have had in the past.

To get those changes that we want—we want not only social insurance, but a comprehensive program of social progress. Social insurance, the subject of

my report, is an attack upon Want. It is designed to insure that for every citizen, on condition of rendering service while he can, there shall be a sufficiency of income at all times so that neither he nor any of his dependants are in want of the physical means of healthy subsistence. That is the gist of my report on social insurance.

It is a plan for securing that no citizen is in physical want through lack of insufficient income when he cannot earn, whether the interruption of earning is due to sickness, to unemployment, to any accident, to old age, or to any other cause. But, and this is one of the earliest paragraphs in my report, want is only one of five giants on the reconstruction road, one of five evils that have to be attacked in order to make the new Britain that we desire.

Want of sufficient income is only one of five giants and in some ways the easiest to attack and kill. The other four giants on the reconstruction road are: Disease, Ignorance, Squalor and Idleness. Let me explain briefly what I mean by each of these terms. Well, the meaning of Disease is obvious; and so are the means of attacking it. One cannot abolish all disease but one can attack it and one can diminish it. To attack and diminish this giant of disease means the development of comprehensive health services for all citizens, covering all their requirements. That also is part of my report.

My report proposes not only insurance to secure cash income when earnings are interrupted, but, that in virtue of contributions made while one can earn, one should be entitled to get medical treatment of all kinds without a payment at the time of treatment. That is to say, the treatment that one needs, whether at home or in hospital, should be provided without charge at the time of treatment; there should be no economic barrier to the citizen being as well as science can make him.

I come to the next giant evil, that is, Ignorance. Attacking ignorance means a great development of education. It means for Britain more schools and better schools. It means to me, perhaps even more important, a great development of adult education, in order that citizens of Britain should not cease to learn when they go out to earn. There are many things which you can learn much better when you are older, because you can understand better when you are older. The development of education is a vital thing for any democracy, for two reasons. First, no democracy can afford ignorance among its citizens. Democracy depends upon the citizens casting their votes rightly, and that in turn depends upon education. Second, democracy implies equality of opportunity for talents. We cannot afford not to use all the talents we have in the country. We must get greater equality of opportunity for all people, both that we may use their talents and that we may avoid that unhappiness which comes when talents are unused. The greatest unhappiness in the world is having gifts which one cannot use, such as is brought about by restricting the able boy to work below his capacity. We must have greater equality of opportunity in education.

I come now to the next of these giants, which I call Squalor. I do not know what you would understand by that; but I understand by that the evils of bad housing and bad living conditions, which come about chiefly because of the disorderly growth of our great cities. We suffer now from our cities having grown too large, and having grown without order, without plan; this means, for large parts of the population, bad housing and bad living conditions, needless dirt, needless work for the housewife, excessive waste of human energy in travelling to and from work to the place of living. Dealing with squalor involves on the one hand better planning of the use of our town and country; on the other hand it involves a great development of housing, an immense programme of new building.

I come now to the last of these five giants, Idleness; by that I really mean prolonged unemployment. You will see that I distinguish between the

evils of Want and Idleness. Want is something you can deal with by providing an income: you can guarantee that no people need starve, by providing an income when they are sick, when they are old, when they are unemployed, and when they are injured by accident. But providing an income to people who are unemployed for years and years together is a thoroughly inadequate remedy for unemployment, for the kind of unemployment that we had between the two wars. One must go beyond providing an income and ensure that that long unemployment does not occur. It is well to distinguish between the evil of want of the physical means of subsistence, which you can cure by social insurance and which is relatively easy to cure, and the much greater and more difficult evil of mass unemployment which corrupts people even if they have an income.

Of course, there are many things to be done in reconstruction outside the domestic sphere; we have to ensure peace and stop wars forever. In the domestic sphere, our programme should be an attack on these five evils of Want, Disease, Ignorance, Idleness and Squalor, and I think I can assure you that something is being done about all those evils in Britain, just as I know that a great deal is being done in regard to all of them so far as you need to deal with them in Canada.

I came here to talk about Britain rather than about Canada, but I should just like to refer in one word to that remarkable report that Dr. Marsh has produced for you on social security. Dr. Marsh sent that to me. I got it in early March in Britain, and I was very much puzzled by it, because it referred to the Beveridge report; and therefore it presumably had been finished after the Beveridge report had been published. But I could not conceive how any document of that ability, scope and length could have been produced between the publication of the Beveridge report and the time when it was produced. Yet, I gathered that it was. Dr. Marsh seems to me to be a young man of extraordinary energy and has produced a report of first-rate importance. That report, although it is Canadian to the core, and in some important ways differs from my proposals—it differs in regard to workmen's compensation; it differs in regard to proposing a graduated scale of benefits and contributions instead of a uniform scale—it sets out a plan for giving security on the same full scale as was proposed for Britain in my report. I have no doubt you will not adopt the whole of it any more than Britain will adopt the whole of the Beveridge report. But Britain will adopt most of the Beveridge report, I am sure, with suitable adjustments and variations. I hope that something like Dr. Marsh's plan or something better than it, if you can improve it, will come into force in this country as I think that something like the Beveridge report, or something better than it, will come into force in Britain.

But it is not only for social security that we are planning in Britain. We have had this report of mine, which was discussed in parliament, and on which the government has now set up both a committee of the cabinet and a committee of officials to work out the details. One of the reasons the government of Britain have not finally committed themselves to the proposals of my report is because there are all these other evils to be dealt with; because they must weigh the expenditure for social security against the expenditure that may be required for housing, for dealing with squalor, against the expenditure that may be required for the development of education, and for dealing with idleness. The very fact that we are in Britain, I think, proposing to proceed on a broad front, is the reason the government, until they can see what all needs to be done, have said, "For the moment we cannot commit ourselves to any one thing until we know all that is wanted, and the whole cost of the budget." I am only speaking from my own impressions; I have no authority to speak for the government, but I think you may take it, if there is any hesitation in Britain

about my report, that it is only because the government want to go on a broad front and not because they do not want to have social security.

In Britain we have this proposal for dealing with want and disease. Those are two of the evils. They are in my report and they are under consideration by the government now, and under active consideration. Those of you who heard the Prime Minister speak on March 21 will realize that that consideration is very active. For dealing with ignorance and the development of education, there are plans being made by our Ministry of Education for squalor, we have both a Ministry of Works, which is concerned with housing, and a Ministry of Planning, which is concerned with planning the use of town and country.

The last of these five giants is Idleness. I am inclined to say that idleness is the largest and fiercest of all the giants. This problem of maintaining productive employment is a problem of which we do not yet know the solution in Britain, nor, I imagine, do you know it finally in Canada. Yet it is not a thing to despair of. When people tell me that unemployment cannot be abolished, I say, "Well, at any rate it has been abolished twice in my lifetime: in the first world war and in the second world war." When people tell me I am over-optimistic in thinking unemployment in Britain after this war need not average more than eight-and-a-half or ten per cent and they think it must go back to fifteen or twenty per cent, I say to them: "At the moment it is less than one-half per cent; why must it go back to ten or fifteen per cent?"

Unemployment has been abolished twice in my lifetime, in two wars, and it is interesting to realize what are the conditions under which it gets abolished. It gets abolished broadly on two main conditions in war. One is that you have state planning to meet urgent needs. The community realizes there are certain needs which must be met if we are to survive; the need for arms of all kinds, ships, aircraft, tanks, food, all the necessities of life up to a certain limit must be met and plans made to meet those needs. The state takes over the direction of the whole of industry and production in order to meet those needs. That is one of the conditions on which unemployment is ended in war.

The second one is we get in war complete fluidity of labour and other resources. You do not get barriers to the use of men in the armed forces because they do not want to go into the armed forces or because people in the armed forces want to keep them out. You get in war the removal of all craft barriers all those barriers which in Britain at any rate, sometimes prevent the best use of our labour resources.

Those are the two conditions by which we are able to abolish unemployment, state planning and fluidity of labour and other resources. The fundamental question is how much of those conditions we must import from war into peace if we want to do the same thing or something like it in peace. Obviously we do not want to import everything of war into peace. Obviously in peace you must have a great deal more of private initiative and private enterprise in order to explore new needs. We do not want to have all our needs and all the things we want determined for us in peace as we do in war, but there must be some kind of plan for peace as there is a plan for war.

I believe that is clear, and equally I think there must be in Britain—I daresay it does not apply to you but it does apply to us in Britain—a greater fluidity of labour and resources, a greater readiness of people to turn to what wants doing instead of insisting on being employed in the ways in which they were employed the last time. I often say to the trade unions, and I think they would accept it, that nothing that any government in Britain had done between the two wars could have found employment for all our coal miners as coal miners, all our shipbuilders as shipbuilders, all our textile operators as textile operators, because the world demand for these things had fallen off. These men might have been employed in other ways usefully, but not in their own trades. I think after this war we shall have to have a greater readiness in Britain—I

do not think it applies so much to you—to change our jobs, to do what is wanted and not merely what we have been used to doing before. That is one thing that will be wanted. The other is that I think we shall in some way or other have to find a way of combining the responsibility of the state and of the community for maintaining employment with the use of private enterprise as a means of discovering new needs, of providing initiative and change in the community. I daresay different countries will have different solutions for that after the war, quite obviously they will. Presumably one of the united nations; Russia, will continue to organize her industry after this war very much as she has organized it in the past. Frankly I do not want anything like that for Britain. On the other hand I think that the United States will certainly undoubtedly try to rely very largely upon private enterprise. In the United States they still have a greater suspicion of government than we have in Britain. I think Britain will compromise between the two. I think Britain will use a combination of state enterprise and private enterprise. I do not know what line you will take. I suspect that like Britain you will be somewhere between Russia and the United States, possibly nearer the United States, possibly nearer Britain. I just do not know. There is no need for absolute uniformity in this at all. Circumstances in different countries differ.

I have got a report written on how to deal with want and disease but I have not yet got a report written on how we are to deal with this fifth giant of idleness. That is one of the things we have to discuss together. Having regard to what happens in war, to the fact we are able to abolish unemployment in war, to the fact that our total needs in peace are not less than what we need in war, although quite different in kind, I just do not believe that we cannot solve that problem if we are willing to pay the price.

To solve the problem of unemployment after the war and to maintain employment is, I believe, a good worth any price except war, and except the surrender of essential liberties. There are certain liberties which one in Britain would not surrender under any circumstances: liberty of worship, liberties of free speech and free writing; freedom in choosing one's job. Of course, choice of job has to be limited by the fact there must be a job available. You cannot have two people both choosing to be Archbishop of Canterbury because there is only one archbishopric to be filled, but freedom in choosing a job is an essential part of British liberty. I think that most important of all is freedom of association in unions and in political parties. To me a one-party state is not a democracy, whatever else it may be, because it does not enable me to change the government when I want to change it without shooting the governor. The essence of democracy is that one can change one's governor without shooting him. I do not like shooting him and the trouble is he is apt to shoot me first. Peaceful change of government is the essence of democracy and freedom to associate in new political parties is essential to secure this. Freedom to spend one's personal income is also an essential liberty. All these things we shall preserve.

I am not sure that I regard private enterprise in the sense of private ownership of means of production and employing other people as an essential British liberty. I think it is a very good device. It is not an essential liberty because, for instance, I have never had it myself. I have never owned a means of production except a fountain pen and I have never employed anybody except a gardener and yet I am as free a Britain as anyone can find anywhere in the world. The issue between state enterprise and private enterprise is not a question of essential liberties; it is a question of means, of method, of what is the most effective machinery for maintaining employment and raising the standard of living. Subject to the essential liberties that I have named, I believe one can maintain employment in Britain; and I believe that in Britain we are determined to maintain employment and shall be prepared to take the necessary steps to that purpose.

All good things can be got for a price, but nothing can be got without a price; and I believe that the price of making a worthy new Britain probably is the same as it would be in Canada. There are two things that are necessary. First, we must be prepared to look ahead. In Britain one of our darling vices in the past has been that we did not like to look ahead; we trusted to muddling through. I hope now we have learned that you cannot do that with advantage. You do not do well in war if you have made no preparation for war; I think we have now come to realize that you cannot do well in peace if you have made no preparation for peace during war. Every war government—in your country, in my own country, and in all the countries of the United Nations—has two jobs: that of conducting the war to victory, and that at the same time of making plans and deciding on plans during the war for what is to happen when victory comes. We hear people saying: Let us win the war, and think about peace afterwards. That may be all right for people of my age. It is, I am sure, not what the young people who are doing the fighting will want, or will stand. I see streams of young men. They come through my hands at Oxford, many of them on the way here to train for the air force. They are ready to do all that is needed for victory. There is no question about that. But they are not thinking about victory as an end. They are interested in what is to happen afterwards. And we have to make plans for what is going to happen after, now.

The second part of the price for maintaining employment after the war is that there must be more international collaboration after the war than there was before it. That is one field. Obviously there must be international collaboration in preserving the peace after this war and the preventing of future wars. No one country can do that for itself. That can only be done by collaboration.

Another thing that no one country can do for itself is to maintain employment. That does not depend upon the way in which you organize your own industries. You can organize your industries in one way and the people of Britain can organize theirs in another way; and in the same way the people of the United States can organize theirs in another way, and the people of Russia can organize theirs in another way, and so on. However we organize it, all our industries will be affected by what is done by international trade. There must be consultation about international trade, about economic policy and trade policy between the different United Nations.

So that I would end by submitting three propositions: First, maintenance by social insurance of a minimum income to keep people out of want is vital, and in a sense the bed rock of all social reconstruction after the war; but it is only one element and it should be regarded only as one element in our programme. We must attack want, disease, ignorance, squalor and idleness; all of these, and not one only.

The second proposition is that plans for doing this must be made now and not left for consideration until after the war.

The third proposition is that the plans must be made in some essential things like consultation between the United Nations now, and in collaboration between them.

Those are the three propositions which I would submit to you. I submit them to you with great hopefulness. I know how much thought you are giving to this problem of social security in relation to other problems after the war. You are looking at the problem as a whole. You are clearly looking at problems now and not waiting until after the war. Finally, you have been good enough to invite me to come and speak to you of my suggestions. To me that indicates that you realize the importance and the necessity of international collaboration. Therefore I speak to you with hopefulness.

We must not regard this planning for what is to happen after the war as in any way a weakening or a diversion of our war effort. The year 1942 was the year in which we discovered this intense interest on the part of the British

people in what should happen after the war, but it certainly was not a year in which the British people were at all backward in prosecuting the war. We can do the two things together; we must do the two things together. It is not weakening the war effort to think about what is to happen after the war; it has strengthened the war effort, because it shows to all our people—and above all to the young—what we are fighting for, and not merely what we are fighting against. That will strengthen our general determination, because we see an end beyond victory, not merely a victory which leads nowhere.

The CHAIRMAN: Sir William, what is the attitude of labour in Great Britain to your report, especially towards the extension of medical services to all?

Sir WILLIAM BEVERIDGE: Well, the attitude of labour, I think I can quite safely say, is one of very strong support for practically everything in the report. It so happens that shortly after finishing my report I was married; and shortly after submitting my report there were three bodies in Great Britain, the trade unions congress and a party called the National Council of Labour, which is a combination of the trade unions congress, the labour party and of the co-operative party. They naturally wanted me to come and talk to them about my report. It so happened that the only possible day that they could fix was the day after my marriage, and I had been meaning to go away to Scotland—

Hon. Mr. MACKENZIE: Hear, hear.

Sir WILLIAM BEVERIDGE: Obviously, they could not except me to be separated from my wife on that day. But I told them that if she might come with me we would go and speak to the trade unions congress; and we celebrated our first day of wedded happiness by meeting the trade unions general council in the national council of labour in London, and my wife made a speech to them. After that—I do not know whether it was the outcome of that—they practically agreed and said that they wanted this report. I think I can tell you that the trade unions would have accepted the whole of this report, with certain modifications. In general, I can assure you that the trade unions congress and the labour party would have accepted in principle the whole of that report.

But, on the medical side, that proposal to have a comprehensive medical service for all and to have it lifted out of social insurance and administered by some other body was the actual proposition which the trade unions congress made to us.

I might go on further and say—if any of you are able to look at the evidence given to my committee by the trade congress, and by the various organizations that came before us—that if you were to compare what the trade unions congress said with what I proposed, you would find that they were practically all on the same lines. They wanted a comprehensive scheme allocating minimum benefits. They wanted pensions given only for retirement; they wanted a whole lot of other things, all of which are in my report. Let me say that I have no doubt whatever of the strong support of labour for the whole of this report; indeed it was because they thought the government would not go far enough and fast enough in supporting this report that they voted in parliament against the government and against their own ministers. Labour is entirely, and I should say, absolutely solidly behind the essential principles of this report.

Mr. TURGEON: Sir William, I have two questions which I should like to ask on behalf of members of our own committee on reconstruction and re-establishment. This does not mean that other members may not ask questions if they wish. The first question is from Mr. Gillis of Nova Scotia and is as follows:—

Would Sir William Beveridge explain the difference between social insurance as proposed in the Beveridge report and the Marsh report and

social security as it is being administered in New Zealand at the present time? Which does he consider the most stable particularly with regard to financing?

Sir WILLIAM BEVERIDGE: I shall make the comparison first with New Zealand. New Zealand, under the Act of 1939, I think it is, has the most comprehensive scheme of social security in the world. I am not clear about Russia, and I shall leave Russia out for the moment, because they have a different economic system. Of any community with an economic system like Britain, New Zealand's scheme is at security much the most comprehensive; they are doing now practically all the things that I propose in this report. They have covered them pretty well as completely. The one important difference—of course, there are a lot of minor differences—but the one important difference is in the method of financing. In New Zealand the whole of the security is financed by a special income tax. That is to say, there is not a uniform contribution, there is no single flat contribution for everybody; everybody pays according to his capacity. I propose financing through a tripartite scheme of payments by the insured persons themselves through a tax on their wages, by the employer through a tax on his payroll, and by the state; and roughly my proposal is that one-quarter is to be contributed by the insured person, one-quarter by the employer and one-half by the state. Some people have asked: since you are going to have a compulsory tax why not do it all by income tax as in New Zealand? Why have a fixed contribution from everybody irrespective of his means? Does not that mean that the poor man is paying a larger proportion of his income for social security than the rich man? My answer is that I am quite certain that that is what the people of Britain want. It adds to their sense of self-respect to make a contribution irrespective of means. I do not believe that the people of Britain would have thanked me with anything like the same enthusiasm for a purely non-contributory scheme. None of the bodies representing the main bodies of British opinion, the ordinary insured person, the trade unions, or the friendly societies proposes abolition of the contribution.

Let me add another reason for having a fixed contribution. If you have everything simply coming from the state, apart from the fact that it looks like giving people everything for nothing, you set up a pressure simply to increase benefits irrespective of contributions. If nobody is paying contributions at all, everybody is going to ask for more and more benefits, and the taxpayer will find that out. If you have a system under which more or less a fixed proportion, say, one-quarter is raised in contributions, people will realize that they cannot get unlimited benefits without paying for them; and I believe that is an element of sound finance. In the last resort, there is not so much difference between my system and the New Zealand system as might appear; because although with my fixed contribution every man, whether his wages are £3 or £6 or £10 a week, pays the same insurance contribution, nearly every one pays also as a taxpayer. The £6 a week man or the £10 a week man or the £20 a week man pays more as a taxpayer, and we are nearly all taxpayers. But I do think it is a good plan to have a fixed contribution as well as taxation. That is the main difference between the British scheme and the New Zealand scheme.

There is another difference, and in this respect I think frankly that the British scheme is better than the New Zealand scheme, and it is this: in nearly all the New Zealand benefits there is some kind of means test—it is not a very stringent one, but to some extent there is a means test—and I do not think that is good. They do not apply that to pensions but they do apply it to sickness and unemployment benefits, and I think that is a pity.

Now, I come to the Marsh report. That is very much like my scheme. I do not know whether it is going to suit you; you must argue that out for yourselves, but if you should adopt it I should be delighted, because I should feel that you had a scheme very like our own scheme.

There are two main differences, and they are these: firstly, in place of a fixed flat rate of benefits and a flat contribution for everybody, irrespective of earnings, it is proposed by Dr. Marsh that you should have different rates of benefits and contributions, at any rate for all the employment risks such as unemployment and sickness, though not for pensions. In Britain our population is so homogeneous and we are so industrialized; even agriculture has become so and is getting up so near to the wages of industry that we can, I think, have a flat contribution and a flat benefit. As you know, I am proposing for a man and wife something like 40 shillings a week as subsistence in unemployment, in pension and in sickness, and that applies to everybody, and I am suggesting a flat contribution of 4s. 3d. a week for the adult man in employment and a different rate for women, but there is no difference according to earnings.

Now, Dr. Marsh's report proposes a continuation of what you have in unemployment insurance, a graduated scheme of benefits and contributions related to earnings. There may be a very good reason for that, and it is not for me to advise you; but so far as I can judge there is a very good reason for that difference. You probably have greater differences in standards of living in this country and in different parts of this country than we have in Britain, and it is good, therefore, to have that variation.

Another difference between Dr. Marsh's report and mine relates to workmen's compensation for industrial accident and disease. In Britain our present scheme is that the employer is individually liable and is left to insure against his risks commercially; that is not a good system; practically everybody in Britain wants to change it. In changing it I am proposing to make it a social service part of the general social insurance. You have now a different system from ours; Dr. Marsh says that it has worked well, and on the whole he assumes that it should not be changed.

I think those are the main differences between the two reports. Far more important are the points of similarity. Each of us proposes a comprehensive scheme covering all risks. Each proposes to give pensions not simply for becoming 65 years of age as at present but only on condition of retirement and to increase the pension if retirement is postponed. You are proposing to have universal medical treatment and children's allowances. If you do all this you will have not a copy of the British scheme, but the Canadian counterpart of the British scheme. Each proposes pensions at a flat rate for all, enough for subsistence.

MR. TURGEON: The second question of our committee is by Mr. Castleden and is as follows: "Is it possible for private industry, as we know it, to provide a sufficiently high level of employment necessary for social security of the people? If not, what in your opinion is the alternative?"

SIR WILLIAM BEVERIDGE: This is looking for the last page of the book of which I have written as yet only the first page: on how one can maintain employment. It is not impossible for private industry to maintain a sufficiently high level of employment. I should say that if we could get back to the levels of unemployment that we had before the first world war it would be possible. That was done by private industry. The unemployment that we had in Britain before the first world war was not more than could have been covered thoroughly by unemployment insurance. When we introduced unemployment insurance in Britain in 1913-1914 we calculated that a benefit of not more than fifteen weeks would cover all but about 5 per cent of the total unemployment. These were golden days. If we could only get back to them, and if private industry could get us back to them, then I do not think you need more unemployment insurance for the unemployment that remains. So it is not impossible for private industry to maintain a sufficiently high level of employment. But if you ask me whether private industry is likely to be able to do this in future, my answer is not so clear. Frankly I am not very hopeful that private industry

will by itself get us back to that, but I do not want to give a definite answer. I am only exploring, myself, how much private industry can do and how much the state must come in to help private industry to-day.

MR. MACINNIS: In reply to the chairman's question Sir William told us that the Labour party and the Trade Union Congress and the Co-operative movement, in so far as their association, the General Council of Labour is concerned, have all endorsed his report. I understand there is considerable opposition to the plan in Great Britain. What sections of society does that opposition come from?

SIR WILLIAM BEVERIDGE: I do not know; I cannot find it. Of course, you would not expect the British to swallow any medicine whole; they would not be British if they did. A lot of them want things changed in this report. I think there is only one body of people—and seriously I do not think they count—who really are violently opposed to the whole plan, and these are the individualists, the extreme individualists, the people who hate all government as such. I think they just represent about 1 or 2 per cent in Britain. They do not count. There are, of course, certain interests, the industrial assurance companies, whom I attack in my report. Quite reasonably they defend themselves by attacking me. The industrial assurance companies do not go about objecting to the report as a whole; they rather say the report on the whole is excellent except those parts of it which refer to them. I have no doubt they are using their agents to make people unhappy about the report. Then there are people who do not think the report gives enough to the old age pensioners. My proposal for reasons which I give in my report is that the full rate of old age pension should not materialize for twenty years. New Zealand has a similar plan in regard to its pensions. Many people think that we ought to give the full pension immediately and I am quite certain that the Labour party will propose to get it not necessarily immediately but much earlier than 20 years. But I have not found any serious opposition in Britain. Whenever a by-election takes place the government candidate finds himself sooner or later saying that he wants the Beveridge report as soon as possible—

The CHAIRMAN: And he wins?

SIR WILLIAM BEVERIDGE: No; he says that he wants it as soon as possible and the other man gets up and says, "I want it now," Then sometimes the government candidate gets in by a small majority and sometimes the other man gets in by a small majority. Honestly, I do not think I am exaggerating when I say I do not think there is any serious, any real opposition at all. There are people who are afraid that we cannot afford it and are hesitant. You all know what the Prime Minister said. He said in his broadcast: "I and all my colleagues are firm believers in social insurance for everybody from the cradle to the grave, but," he said, "we want to see where all this has to fit inside the budget. We have to find money also for education, housing and other things. We want to see where the money is coming from."

MR. GERSHAW: I wonder if our honoured guest would express an opinion on the details of the medical services. For instance, what position will the doctor be in? Will he practice from his own office or from some health centre, and how will he be paid for his services, by fee or salary or on a capitation basis?

SIR WILLIAM BEVERIDGE: That is a very important question, but it is not actually settled in my report and it is not settled yet. What my report says is this: that medical treatment ought to be paid for on a social insurance basis; that is to say, paid for by contributions put in in advance and not by charge when the treatment is given. That is common sense, because when a man falls ill he is apt to lose his income and this is not a time when he ought to have doctors' bills to pay, he ought to have no charge for treatment. The citizen

should pay for his treatment by contributions and by taxation beforehand and not by paying doctors' bills. But that does not settle how the doctor is to be paid or to be employed. It would be quite consistent with my proposals for a doctor to write out his bill every time he visits a patient and send it to a central office instead of to the patient. It would be quite consistent for the doctor to be paid on the panel system that we have at present in Britain. It would be equally consistent with my plan to have a salaried medical service. But the decision between these possibilities is not made in my plan. I have left it open for further discussion. If you ask me what is going to happen I can only say it is now being discussed between the government and the medical profession. The government has said, "We accept the principle of comprehensive medical treatment for everybody." They have accepted that principle. They are discussing with the doctors how this treatment should be organized. The doctors in Britain are, I am sure, completely prepared for a social insurance basis for medical treatment. While my report was being prepared the British Medical Association had a planning commission which made a report proposing that social insurance for medical treatment should apply to 90 per cent of the population; they wanted to keep an income limit of £420 a year, keeping 10 per cent out of insurance. When that proposal came before the British Medical Association as a whole, somebody moved an amendment to drop the income limit and apply insurance to 100 per cent. That amendment was carried by a small majority. You may take it, the doctors in Britain are perfectly prepared for social insurance on health. As to the other point in question, the B.M.A. planning proposal was for the setting up of health centres for medical treatment so that doctors could work together in groups and give specialized treatment. Of course the doctors attach importance to free choice of doctors by patients and patients by doctors. It is quite possible under my scheme to have that, and I have no doubt we shall have that. There is also a difficult question as to how the hospitals should be organized. We have, as you know, a great system of voluntary hospitals and public hospitals; and there is a great deal of discussion as to whether the voluntary hospitals are to be preserved as voluntary hospitals or whether they should all be put under the local authorities. I should say, generally, that the doctors in Britain are prepared for a great development of social insurance in relation to treatment. I do not think they want to have a salaried medical service; but I am not sure how strongly they would oppose a salaried medical service if it were national rather than under the local authorities. There is nothing settled about that, and I cannot say exactly how it all will be done.

Mr. FULFORD: I wonder if Sir William could tell us the per capita cost of complete medical and dental service and what the cost in Britain would be.

Sir WILLIAM BEVERIDGE: No, I cannot. In my social security budget I estimated—and this is a very rough estimate—that the total amount being spent on medical and dental services was in the neighbourhood of £170,000,000 a year; that is, having regard to the population, about £4 per head. That includes everything. It includes what people are paying to their doctors for private treatment. It includes, of course, all the institutions for the mentally infirm and also the hospitals. It includes all the panel payments, and the dental treatment and so on. I say at once, that I think that is not a very firm figure. It is very difficult to estimate; but it is in that neighbourhood of £170,000,000 or £180,000,000 a year. That is the whole cost. My proposition is that, for social insurance, something like one-quarter of that should come from the contributions of insured persons, the rest being found by national taxation or local taxation; that is, the rates.

Mr. BLANCHETTE: Would our distinguished guest care to give any comment as to his appreciation of children's allowances in any plan of social security?

SIR WILLIAM BEVERIDGE: I am very glad you asked that question, because children's allowances are the most revolutionary thing in my report, and they have been accepted in Britain. I propose children's allowances for two main reasons in my report; meaning by children's allowances, allowances paid both when the responsible parent is earning and when he is not earning, not simply paid when he is on a benefit but also when he has wages. I propose that for two reasons. The first is that without children's allowances you cannot abolish want. Wages may be enough for a man, wife and one child, or for a man, wife and two children. But when you get up to really large families, we find in Britain that there are appreciable numbers of cases where the wages are not enough for the size of the family. Poverty in Britain before the war was due to two causes. My whole report starts with the diagnosis of poverty. It was due either to the interruption of earnings or a man having too large a family for his wages. About five-sixths of all the poverty was due to the interruption of earnings—I mean through old age, sickness, unemployment and the rest of it—and about one-sixth was due to cases where the man was in work but he had too large a family for his wages. We do not believe that Britain can get on unless there are a substantial number of large families. Some people will have a small family or none. Unless we can get an *average* of nearly three children born to a family the British race will diminish and finally die out. Therefore there must be some large families and we want some large families. In order to abolish want, you have got to have children's allowances. That is one thing. The secondary reason is that if you give allowances for children only when people are unemployed or sick, you will sometimes have cases where people have as much money when they are sick or unemployed as they can earn, or even more. That is a bad situation. It is wrong that a man should be getting more when he is without work than when he is working; yet you cannot avoid that if you have a wage system which takes no regard to family responsibilities. There are quite a number of other reasons for children's allowances such as its effect upon the population and the quality of population which I will not go into now. But the two reasons in my report are those. Until recently there was considerable opposition to children's allowances on the part of some trade unions. But at the last Trade Union Congress, in September last, they accepted children's allowances. It has been accepted by the government. The government propose to give less in amount than I have proposed but they have accepted the principle. I think you may take it that it will be adopted. I should be very much interested to see whether or not you adopt it in this country. I hope you will, because I believe it is a good thing; but it is a bigger change than anything else in my report. There is nothing new in social insurance. We all know about it in Britain. We all agree upon it. The thing upon which we have changed our minds in Britain—and I think we have changed it—is children's allowances.

THE CHAIRMAN: These questions are all very interesting, but I would remind the committees that Sir William has an engagement very soon. If you make your questions very brief, we have time for perhaps three or four more.

DR. MCGARRY: Sir William, I should like to direct one question to you and it will call for but a brief answer. Granted that this social security plan will be accepted by the government, and arrive at the legislative structure, is it the general conception that there will be a waiting period, or will these benefits be put into effect right away?

SIR WILLIAM BEVERIDGE: I do not think it will be put into effect until after the war, if that is what you mean. You are not thinking of the waiting period at the beginning of unemployment or sickness?

DR. MCGARRY: No. You say "after the war"?

Sir WILLIAM BEVERIDGE: My proposal is, that it should only come into force after the war. The one matter on which it is possible that we might make an exception and proceed earlier is children's allowances. Quite a number of people think we ought to start those at once. But my whole scheme was for after the war.

Mr. KUHL: Mr. Chairman, may I ask Sir William if it is fair to say that in so far as his proposals are concerned and the source of funds to support them, they do not involve more than a redistribution of the existing financial income? Then as a further question, would he agree that the legitimate purpose of an economic system is the provision of an abundance of goods rather than an abundance of jobs?

Sir WILLIAM BEVERIDGE: What is in my report for social insurance is a redistribution of income and a redistribution of purchasing power, both horizontally and vertically. Let me explain what I mean; I mean horizontally as between the times of earning and not earning. I want to make sure that everybody has an adequate income when he is not earning as well as when he is earning. For that purpose I take part of his earnings, when he is earning, in contributions and transfer it to the time when he cannot earn. That is redistribution horizontally. There is also a redistribution vertically by taxation. It is a redistribution of purchasing power, because it is no good having goods unless you have purchasing power. Without purchasing power you do not abolish want. You must see that there is purchasing power available at all times up to a minimum in order to abolish want. Of course, I agree that the essential is the production of goods. The object of that is secured by maintaining productive employment. That is dealing with the giant, idleness. This report deals with the giant, want. Both these things are needed and you cannot do without either of them. You cannot do without social insurance to redistribute income. You cannot do without productive employment to see that there is enough total income to be distributed.

Mr. TURGEON: I have one more question from our committee asked by Mr. Paul Martin: Is not your scheme predicated upon the maintenance or stabilization of the price structure? Would you agree that the stabilization of the wage structure is not necessary to your scheme?

Sir WILLIAM BEVERIDGE: I think any economic system which uses prices at all must assume, indeed not absolute fixity of prices, but reasonable stability. You cannot reckon with counters which alter their value very largely every day. I think we have in Britain a general policy of stabilizing prices so far as possible. The Chancellor of the Exchequer said he hoped to be able to keep prices after the war to something like thirty per cent above the pre-war level. My scheme is based upon something of that sort. When you come to stabilization of wages I do not contemplate that after the war we shall have anything like compulsory arbitration or state fixing of wages. I am sure that the trade unions would not accept that and I do not think they need accept that. I do not think you need stabilize wages in a sense to prevent them from rising if production rises. Of course, you cannot have wages rising if production is not rising and prices remain stable, but I do not want stabilization of wages because I see no limit to the possible improvement of wages in Britain as our production improves.

Mr. BLACKMORE: Is it possible for anyone who is not a member of one of these committees to ask a question?

The CHAIRMAN: Surely.

Mr. BLACKMORE: I should like to ask two or three questions of our distinguished guest. The first one has to do with the conditions which he found obtained during the war. The first one was that there was a planning of production during the war.

Sir WILLIAM BEVERIDGE: Yes.

Mr. BLACKMORE: Is it not equally true that during the war there is a planning of distribution, that is, we have no more worry about markets? What we are unable to consume ourselves we let the enemy consume, and it is one of our major problems in peace the provision of an equally effective method of distribution so that in so far as we are not able to use our goods we are able to dispose of them in some other way? Would that not be worthy of consideration?

Sir WILLIAM BEVERIDGE: I am not quite sure that I follow the point. Others seem to. Perhaps I might get some enlightenment.

Mr. BLACKMORE: I was unable to hear.

Sir WILLIAM BEVERIDGE: I say I am not sure that I follow the point so if I do not answer you correctly you will tell me.

Mr. BLACKMORE: One was the method of disposing of goods. How are you going to sell goods? How are you going to get markets? Even if the government did have a planned production during peace how would it sell the goods?

Sir WILLIAM BEVERIDGE: My planning of production means that the state should ascertain the needs. There are needs in peace as there are in war. There are needs for houses, for schools, for hospitals, for furniture, clothes, travel and every kind of need. That is true in peace as in war. In peace we shall be supplying our own citizens with goods rather than as in war supplying the enemy with beds, but I do not think that there is any need for the state in peace to control distribution in the sense in which it controls distribution in war by rationing, and so on. I do not think that is necessary. I do agree we have to find markets for all we produce in peace. I simply say the needs of peace are unlimited and it is only a question of organizing to meet them.

Mr. BLACKMORE: There is no question, Mr. Chairman, about the need being there. The question is: Are the people who need able to buy? If they are unable to buy they certainly cannot satisfy their needs.

The CHAIRMAN: Before we adjourn I am going to ask Lady Beveridge if she will kindly address the meeting.

LADY BEVERIDGE: Ladies and gentlemen: I am very much honoured that you should have allowed me to come here to-day, and still more that you should ask me to say a few words to you. You would not expect me to go on talking about my husband's social security plan although, in fact, it contains a number of regulations about the status of women in our country that are novel and interesting, and that have pleased and gratified the women of our country very much. I should only like to endorse what William himself has said about our great delight in coming here and the wonderful welcome you have given to us in your beautiful city. Last night I was in a gathering that consisted almost entirely of Scots and I imagine from some of the names that I have heard this morning that there are quite a number here, too. I only want to thank you all from the bottom of my heart for your kindness, and I know I speak for my husband, too.

The CHAIRMAN: Senator Lambert please.

SENATOR LAMBERT: Mr. Chairman, Sir William and Lady Beveridge, ladies and gentlemen: The demands upon our distinguished guests require that we draw this discussion to a close. It is my happy duty to express to a certain extent our appreciation of their presence here to-day. On behalf particularly of the committee of which I have the honour to be chairman, and also of that branch of parliament which I represent, I should like to say to them both how deeply we appreciate their being with us to-day. We have looked forward to their visit with a great deal of anticipation, and I am sure that their presence with us this morning has met and fulfilled all our expectations. I am sorry particularly that these questions which were developing should have been

called to a stop. As a matter of fact, this meeting was assuming more and more the form of many occasions of meeting in this room, and as a frequent attendant at those meetings I have often wondered just what it would be like to sit on this side of the table and look into the faces of those who are asking questions.

I might say, Lady Beveridge, that in the chair which you are occupying to-day there usually sits on such occasions a very distinguished gentleman whose duty it is to sum up the discussions at the end of the meetings. I am sure if he were here to-day he would agree that the average quality of the discussions had been considerably elevated and the atmosphere of this room had been greatly enriched by the contribution of Sir William and yourself. I might also say coming from that other House which has been so often referred to in admiration by so many, that we appreciate greatly the honour of being here in association with my friend, the Chairman of the House of Commons' committee and his members. I am sure that in future we shall refer to that other place with due restraint. I can only add, Mr. Chairman, that it has been a great privilege to be here.

Mr. TURGEON: Sir William and Lady Beveridge, Senator Lambert and Mr. Chairman: time presses, and I will say nothing whatever, except to express the deep appreciation of the members of the House of Commons Committee on Reconstruction and of all others who are present this day, to you, Lady Beveridge, and to you, Sir William, for yourself and for what you have given us to think over. I am positive that your earnestness will add spirit to our committee, and that our activities will be increased because of your visit.

I thank you.

Sir WILLIAM BEVERIDGE: I have only to thank you very much indeed, for your attention and for your questions. I do find questions most stimulating and most helpful, and I never have gone to a meeting in which questions have been asked that I have not gone away, I hope, a wiser and better informed person. I certainly have learned to-day. I naturally rather wish, after listening to Senator Lambert, that I could have the opportunity of seeing this room in one of its more normal sessions; sitting perhaps, in that corner over there where Mr. Blackmore is. If, as seems to be suggested by Senator Lambert, to-day's proceedings lead to the Senate having a greater opinion of the House of Commons or, the House of Commons of the Senate, I shall feel that I have done something for political security as well as for social security.

Thank you.

The committee adjourned at 12.20 o'clock, p.m., this day to meet again on Thursday, May 27, 1943, at 11 o'clock a.m.



Doc.  
an  
om  
R

SESSION 1943

HOUSE OF COMMONS

---

SPECIAL COMMITTEE

ON

# RECONSTRUCTION AND RE-ESTABLISHMENT

---

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 17

---

THURSDAY, MAY 27, 1943

---

WITNESS:

Mr. D. G. MacKenzie, Chief Commissioner, Board of Grain Commissioners

OTTAWA  
EDMOND CLOUTIER  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1943





## MINUTES OF PROCEEDINGS

THURSDAY, May 27, 1943.

The Special Committee on Reconstruction and Re-establishment met at 11 o'clock, a.m., the Chairman, Mr. J. G. Turgeon, presiding.

*Members present:* Messrs. Authier, Bence, Bertrand (*Prescott*), Black (*Cumberland*), Castleden, Gillis, MacKenzie (*Neepawa*), MacNicol, McDonald (*Pontiac*), McKinnon (*Kenora-Rainy-River*), McNiven, Matthews, Nielsen (*Mrs.*), Ross (*Calgary East*), Ross (*Middlesex East*), Sanderson, Turgeon and Tustin.—18.

*In attendance:* Mr. D. G. MacKenzie, Chief Commissioner, Board of Grain Commissioners.

The Chairman reported that the steering committee had arranged that on Friday, May 28, the committee hear representatives of the Canadian Chamber of Commerce; on Wednesday, June 2, the premier of Manitoba and, possibly, some other ministers of the Manitoba government; on Thursday, June 3, Mr. W. M. Neal, vice-president of the Canadian Pacific Railway; and at a later sitting, a representative of the Canadian National Railways.

Mr. MacKenize was recalled and further questioned.

Mr. MacNicol suggested that Mr. Harry W. Monahan, Superintendent, Saskatchewan Industrial Board, be called before the committee at some future date.

On motion of Mr. Matthews,—

*Resolved*,—That a vote of thanks be tendered to Mr. MacKenzie for the valuable information furnished by him.

At 1.05 p.m., the committee adjourned to meet again at 11 a.m. on Friday, May 28, 1943.

A. L. BURGESS,  
*Acting Clerk of the Committee.*

suggest that the figures referred to were not mine. They were prepared by the Canadian Federation of Agriculture and quoted in the "Country Garden". Saying that, I do not propose to contradict them at all; I presume they are pretty much in accordance with the fact. I do not know what the answer is to why the farmer has not been getting the cost of production. It may be in the fact that the market in which he has been selling his products has been too restricted, so much so that there was no competitive price for his goods.

Q. You do not mean the Grain Exchange?—A. No, I certainly do not. I think the answer might be found in the situation that has been created in the last three years. As a result of war conditions and war demands there has been an export demand developed for our Canadian foodstuffs sufficiently great to take substantially increased quantities, and which created a competitive price for that which would prevail on our domestic market, and as a result we have had both a very substantial increase in volume and a very substantial increase in price resulting in a broad general way in a reasonably satisfactory agricultural return.

There are exceptions to that, of course. In asking me how those price levels can be maintained, if you will tell me we can maintain a competitive export price comparable to the situation that now prevails so that we can maintain our level of production at approximately the present level of price then much of our agricultural difficulties will disappear. I think the crux of the whole problem is just in that very fact, the maintenance of a competitive market sufficiently great to take our production at a price that will permit a reasonable standard of living on the farms. I think that is the best answer I can give you.

Q. A competitive market would imply that there must not be too great a supply?—A. Not necessarily. We have not got too great a supply in Canada now.

Q. Of wheat?—A. On the basis of present stocks that might be true, but my own personal view is we may be surprised how quickly that surplus may disappear. There are factors in the situation—I suppose, sir, it is not wise for one to get into the realm of prophecy—there are factors in the situation now that at the least are rather interesting. The United States is definitely interested in getting substantial quantities of feed for their live stock from us and we have some evidence that they are going to convert substantial quantities of their wheat to the production of alcohol, and so on, and if we get a short crop on the American continent this year I think our surplus stocks of grain in Canada will disappear.

Q. I think you are quite right. In fact, I believe the figures show that the American carry-over this year as anticipated will be scarcely equal to one-half of one year's supply?—A. Approximately that.

Q. Do you not think it will be Canadian wheat that will be turned into feed wheat and other wheat that will be turned into their alcohols?—A. Probably, but I am not so much concerned about that. If they take our wheat I do not care what they do with it.

*By Mr. Bence:*

Q. From the point of view of what they are going to do with it we might be interested in what we might be able to do with it?—A. You mean in Canada?

Q. Yes.—A. Yes.

Q. I mention that fact because I would like to know if you have any idea of the amount of wheat that is going to be used in the United States for the purpose of production of industrial alcohol say in the coming year or coming two years and whether we can get any evidence from that as to whether it would be wise for us to increase our own industrial alcohol production in this country?—A. You are opening up a question that is very dear to my own heart.

Q. I think it is a very important one.—A. One of the difficulties that we have in trying to finalize our thinking on this problem arises from the differences

of opinion that are emanating from the United States. What I say must be taken only as personal opinion, but there is evidence of a tremendous struggle going on in the United States to-day as between the petroleum interests on the one hand and perhaps the distilleries and farm block on the other hand in the matter of using cereal grains for the production of alcohol. I cannot help but feel behind that dispute or struggle—and it is a very intense one—there is a desire on the part of these respective interests to be in a position to control the market when the war is over.

Q. You agree with Dorothy Thompson?—A. I have not seen any statement she has made so I cannot say whether I do or not but I do feel definitely that there will be a very large synthetic rubber industry established over there that they now say will be competitive with natural rubber. The demands for rubber after the war may be so great as to make it possible that there will be need for both synthetic and natural rubber. These interests are looking forward and are anxious to be in a position to control production and marketing of these products when the war is over. On the other hand, as I stated last night, I was in New York a couple of weeks ago talking to two very eminent citizens there who made this very interesting statement. They said that on the basis of present known resources of petroleum and on the basis of present known consumption of petroleum their resources would not likely last more than fourteen years; so that these same interests are looking forward to that time when stocks of natural petroleum will be exhausted and other sources of supply will have to be developed.

Q. What interests are looking forward to that, the farm block?—A. The farm block on the one hand—at least, I assume they are, and the petroleum people.

Q. If the petroleum people recognize that fact surely they would not want to be pushing petroleum into the synthetic rubber industry, using petroleum as a base when they know that in a few years there will not be any petroleum.—A. I can understand that from the point of view of their desire to get control of that situation. What I cannot understand is why the petroleum interests do not manifest an interest in the production of alcohol for fuel purposes.

*By Mr. Castleden:*

Q. Is there any guarantee that a farmer selling wheat for synthetic rubber would get his share of the price for which the goods were sold?—A. I cannot say there is but I think here again in thinking of the situation we fall into error in that we think of alcohol or synthetic rubber in terms of number one northern wheat. I do not think they need number one northern wheat. What they are looking for in wheat is starch, not protein. In the ordinary performance of our duties we have to go into the Edmonton inspection offices and last year I saw wheat weighing from sixty to sixty-three pounds to the bushel that was graded five and six because it was frozen black, damaged very seriously from the point of view of its milling value for flour but still holding all the constituents necessary for the production of alcohol, and alcohol in terms of that type of wheat might be much more attractive to the farmer of western Canada than it would in terms of number one northern wheat. Similarly it might be that we would use barley or we might use potatoes.

*By Mr. Bence:*

Q. Did you have anything to do with the investigation that was made, sponsored by the Canadian Chamber of Commerce a few years ago into the production of synthetic rubber from alcohol as a result of which a report was formulated in 1941?—A. Indirectly, yes; I am chairman of what we call our National Chemurgic Committee, and that committee set up a subcommittee which prepared that report.

Q. Then you recollect that the report was very brief in connection with the matter of production of synthetic rubber from alcohol and was not as definite about it as some people make out. I was wondering if you knew whether or not their research in that connection and their estimate as to the cost of production of synthetic rubber was based on number one northern?—A. I think their conclusion was on the basis of the cost they established which—I do not know how much I should say, Mr. Chairman—I personally do not like. I will express it that way, which I personally think is too high. They expressed it in terms of wheat. They do not specify the grade at all.

*By Mr. McNiven:*

Q. Did they name a price?—Yes, they did name a price.

Q. On sixty cent wheat?—A. I have forgotten the exact figure but something like that.

Q. The investigation conducted by the National Research Council is all on the basis of sixty cent wheat?—A. Yes.

Q. And the cost of production of alcohol from that wheat is given as forty to forty-five cents. Does not that prohibit it, Mr. MacKenzie?—A. Yes, it possibly would. I would say this, that I would not accept any figure at the moment as being conclusive because it is only in the last two or three years that there has been any very intensive attempt to discover costs in Canada, and processes of conversion will improve.

Q. Would you say that was true with regard to alcohol?—A. Yes.

Q. I understand the process is at least one hundred years old?—A. The process is but our attempts to estimate costs in Canada are not. I do not think there was anybody—and I stand open for correction on this if I am wrong—I do not think even the National Research Council ever attempted in any specific or definite way to look at this problem in terms of costs up until the last two or three years.

Q. Are you familiar with Dr. Hopkins' report issued in 1939?—A. No, I do not recall that.

Q. Where it gives the relative costs for the production of alcohol from wheat, potatoes and molasses?—A. Yes. I do not recall the report.

Q. I was wondering what would be the cause of that wide disparity in costs as between the production of alcohol from grain and from molasses. I understand that prior to the war they were producing alcohol from molasses around 18 cents or 20 cents a gallon, and even today when they can get molasses they can produce it from 22 cents to 26 cents a gallon; whereas the cost of producing alcohol in our distilleries now runs from 72 cents to 76 cents a gallon.—A. Well, the problem we are faced with in trying to work out these problems and in studying them is this: I have discussed this matter with scientists in Canada associated with some of our research foundations and with the National Research Council and so on, and we have not got in Canada anywhere a chemical engineer associated with agriculture, at least to my knowledge, with any idea of costs. These men whom I speak of, who are associated with research organizations, will tell us that they have the processes. There is no question about that, it can be done; but I have not been able to get any of them who will express an opinion as to costs in terms of commercial production.

*By Mr. Bence:*

Q. You mean, in large wholesale production?—A. In terms of commercial production.

Q. I say, you mean by that large-scale production?—A. Yes, quite.

*By Mr. McNiven:*

Q. I understand that we are now producing annually, and have been for some time, twelve million gallons of industrial alcohol?—A. From molasses.

Q. Yes.—A. Yes, that is true; but we have not, and do not know where we can get, for instance a chemical engineer who can discuss with us with any degree of finality costs of converting agricultural products into alcohol, other than molasses.

Q. What about wheat; I am told that you can get two gallons of alcohol for a — A. You mean, from a bushel of wheat.

Q. Yes, from wheat; and from wheat it costs you 70 cents to 80 cents; and on that basis it is quite easy to figure out what your costs are going to be.—A. No, I do not think that necessarily follows, sir. There is the question of the capital cost of your plant.

Q. Have you any figures that would indicate what that is likely to be? —A. No, other than that I think it is referred to in the report which was mentioned just a moment or so ago.

Mr. BENCE: You mean the report that was issued in 1941.

The WITNESS: Yes. There is an estimated cost there; and, personally, I think it is too high. It may be correct.

*By Mr. McNiven:*

Q. Did you have any indication as to what the difficulties were?—A. No, I did not.

Q. My opinion is that the cost of an alcohol plant is \$200 per thousand bushels of grain daily; and that it is unsafe to start an alcohol plant unless you have a daily grind of at least 10,000 bushels—A. Well, I have no information on that and I could not express any opinion on it.

Mr. McNIVEN: I got my information from scientists.

Mr. BENCE: That is the capacity or size of plant which was recommended as the minimum that would be economical?

Mr. McNIVEN: Yes, having a capacity of 10,000 gallons per day would be an economic unit, and that if you go in for a unit smaller than that it is not economic. And the reason that I am asking Mr. MacKenzie this is that there is a lot of discussion in western Canada over this question and we feel that we have something in the nature of a grievance if alcohol can be used for the manufacture of synthetic rubber in this country—particularly where we understand that about 50 per cent of the synthetic programme of the United States uses alcohol as a base.

The WITNESS: Somebody down there at the other end of the table (Mr. Bence) asked if I had any figures that would indicate the cost of the conversion of grain into alcohol and synthetic rubber in the United States, or as to the volume of grain that would be used for that purpose next year. My authorities are three or four speakers who addressed the annual meeting of the United States Chamber of Commerce, in Chicago last April. They indicated that their anticipated conversion of wheat in 1944 for alcohol would be 400,000,000 bushels.

Mr. McNIVEN: That is close to what I have—650,000,000 gallons of alcohol.

Mr. BENCE: What is that?

Mr. McNIVEN: I said, 650,000,000 gallons; but that would include production from molasses, from grain, from potatoes and from any other sources, and dependent on when they can get the stocks.

Mr. BENCE: Have you any idea how much of that would be grain?

Mr. McNIVEN: No, I have not.

Mrs. NIELSEN: I hear that they use wheat and corn.

Mr. McNIVEN: Yes, they produce a lot of corn. I merely was saying that the information I had was that 650,000,000 gallons was to be made from wheat and corn alone.

The WITNESS: Your statement would appear to be about the same as the information given me.

*By Mr. MacNicol:*

Q. Is there any basis for the press report that was issued from Ottawa sometime in April that prairie wheat would not be used as a basis for the production of alcohol?—A. Well, sir, you are in a better position than I am to know what was said at Ottawa.

Q. It was not said in the House of Commons. It was said by some authority here.

Mr. BENCE: Yes, and it was said in the House of Commons; the hon. Mr. Howe stated it was not the present intention to produce synthetic alcohol from wheat at this plant in Sarnia.

Mr. MacNICOL: In my judgment, and I would like to hear from Mr. MacKenzie about it for he undoubtedly knows a good deal about it; rubber can be produced through various processes from wheat. It is up to Canada to make some effort to build in western Canada for the use of the west's greatest raw product, namely wheat plants which can produce sources of rubber. I cannot see how we are going to help the west unless we insist on building in the west whatever plants are required to use their great surplus of wheat; and to that end let me say that the cost would not be the major factor at all. I keep before me all the time the thought that for the economic life of this country, the rest of the country, the part outside of the west, must do its best to assist the west; and if there is anything in the nature of a surplus that can be used as a necessary part of the process in producing rubber, or other commodities, then that is one thing that we should set ourselves to and start bringing thought. My information is that at the moment we are importing into Canada more than 80 per cent of our oil products and quite a large proportion of these to-day will go into the production of rubber at Sarnia. Naturally I am very anxious to see the Sarnia plant grow and prosper; on the other hand, some effort must be made to give the west a chance to prosper and if a portion of their great surplus of wheat can be used to produce rubber then that would be of advantage to the western farmers. I have heard many people say that the west ought to quit producing wheat in such large quantity, but I am not of that opinion; I believe that God has made that part of the country and so organized nature in that part of Canada, that it can produce wheat better and perhaps more prolifically, both as to quantity and quality, than any other part of the world. Therefore, that being the case, it is up to us to assist the western farmer to help provide for him in some way an opportunity to sell and dispose of his surplus wheat and other products; and if a factory or a number of factories will do that, then we should see to it that they are established there. I am one of those who are of the opinion that if we in this country are importing 80 per cent of our oil products that we are just placing ourselves in jeopardy in being so dependent on other countries. It is from the crude petroleum that that important ingredient, butadiene, so essential to rubber production, comes; and we are importing 80 per cent of a vital commodity, oil; why—why, any little country which has oil in a greater quantity than Canada could cause us no end of difficulty, if we haven't got sufficient oil to maintain ourselves. We know that rubber can be produced from wheat. That has been demonstrated. I think that this committee ought to make every effort possible to see to it that more of the western wheat surplus is used for the production in Canada of more of our rubber requirements, and make ourselves independent. Now, Mr. MacKenzie must have far more information than any of the rest of us on that subject. I secured a lot of fine information from a man whom I believe to be very capable, Mr. Harry W. Monahan—he is one of your Saskatchewan government men out there in Regina, Mr. McNiven; possibly you could tell us what he does?

Mr. McNIVEN: He is the manager of the Saskatchewan Industrial Board.

Mr. MACNICOL: Yes, later on I would like to see him invited down here because he undoubtedly has some very sound ideas for increasing the industrialization of Saskatchewan and I believe he could give us much useful information on that subject.

The WITNESS: I think that much of the confusion of thinking about this rubber of ours arises out of the contradictory statements issuing from these opposing interests in the United States.

Mr. MACNICOL: That is it.

The WITNESS: We are not going to settle this problem in Canada until we do some research work of our own.

Mr. BERTRAND: We must do our own experimenting.

The WITNESS: We are letting ourselves be exploited by one group and then another, and entirely neglecting to face up to the facts. I do not pose as being an expert on these things. I am simply a citizen of western Canada who is enormously interested in agriculture; but I do find authorities and I think they are reputable who express views, and they are positive that this can be done. For instance, the late Mr. Scagram speaking of a book to which I referred when I was here on the 7th of May, published by a Dr. Collicoff and an associate whose name I have forgotten at the moment although he was very very distinguished, and both were very positive in their statements that it could be done and indeed, they visualized carrying on further than that, they think that factories could be established in certain rural centres to which the farmer could bring his grain, have it converted into alcohol and pay for it on the same basis as he does for grain or wheat and take his fuel back, put that in his engine; and getting back to the condition he was in twenty-five or thirty years ago when he produced his own fuel and at that time produced it in the form of oats which he fed to his horses. I think somebody in Canada has got to be directed with instructions to make a study of the situation and see what can be done.

Mr. MACNICOL: Is it not a fact that it can be done?

The WITNESS: That is my opinion.

Mr. MACNICOL: That it can be done—I have just finished reading a report of some hundreds of pages, it was issued from Washington and if you read it through the investigation carried on there in respect to this subject; and since it can be done, then I would ask why should not this committee recommend that it be done in Canada?

The WITNESS: I think your committee can answer that question better than I. But there is a phase of this whole problem that no one is thinking of, particularly these days, and one that I think is a very important phase of it: I was talking to a farmer of Ontario, and he is rather a big farmer—he farms 300 acres and is a heavy producer of hogs and chickens—and that farmer told me that Ontario now is facing a very serious shortage in the production of concentrated foodstuffs for their live stock. The cow, by reason of having an excellent stomach, has the capacity of producing her own enzymes and vitamins, and so on; but the hogs and the chickens cannot, and they have to be supplied with some supplementary diet. These supplementary diets are disappearing in Canada; at least, I am told that the supply available is nowhere adequate to meet the demand. If we get into the production of alcohol we produce a very fine by-product which is a first-class supplementary feed, a supplementary concentrated feedstuff for our live stock.

Mr. McNIVEN: You mean, on account of its high protein value.

Mr. BENCE: It is better than the original wheat, is it not?

The WITNESS: Yes, you have a concentration there of protein content which gives to your live stock a thing which is very greatly needed.

Now, the point I would like to make is the value of the live stock industry, and the fact that it is steadily assuming greater importance in the general economy of agriculture across Canada; just what its effect will be I cannot imagine, but I would say without any hesitation the time has come in Canada when somebody should be instructed to inquire into these things in this country. I discussed this problem with a man in authority here last year and he said something like this to me: he said, if you could tell me how quickly you could produce synthetic rubber from agricultural products and in what quantities I will be prepared to press for the establishment of a factory in Canada. Well, my difficulty was that we have not got—that I do not know of a single person in Canada to-day who has the experience of chemical engineering based on the operation of a factory. I might add this, without any criticism implied of any kind—the government, if one were to ask them that same question, would say that they have no competent chemical engineer to come right out and say, this is what we can do in such and such a length of time; and under the stress of war government perhaps cannot wait; and unless this problem is tackled aggressively now, as somebody said a short time ago, unless we assume the task of determining these things now we are going to be in the same position 15 or 20 years hence that we are in to-day.

Mr. MACNICOL: Exactly.

Mr. BENCE: With reference to the remarks made by Mr. McNiven a short time ago when he mentioned the cost of the production of industrial alcohol; I presume he was taking into consideration the value of the product that would be obtained as a result of such production; is that right?

Mr. McNIVEN: I am told that 40 cents a gallon is the cost of production of a gallon of alcohol after the value for the by-product is taken into consideration.

Mr. BENCE: I see.

Mr. McNIVEN: The nearest estimate I have been able to get was formulated by an authority in Nebraska, whose estimate of the operation of a private plant was 26 cents per wine gallon.

Mr. BENCE: Did that take into consideration the price of wheat—at what price?

Mr. McNIVEN: That is based on 60-cent wheat.

*By the Chairman:*

Q. May I ask one question before you get away from this feature of it? Mr. MacKenzie, some years ago there was a commission inquiring into wheat production and among other places they sat in Edmonton. Representations were made I think on behalf of the University of Alberta in conjunction with the grain commission or some board—I may be wrong as to which board—but in Winnipeg; and those representations were to the effect that wheat grown in the northern part of Alberta, British Columbia and the Peace River district and in and around Edmonton did not contain sufficient protein; and the general recommendation was rather to the effect that wheat should not be grown in that area. You said something awhile ago, that they were now looking for starch rather than protein. Would that effect the situation as you know of it; what effect would it have upon the recommendation that was then made to that grain commission respecting the advisability of producing grain in that northern Alberta and British Columbia country?—A. Well, I would say this: that if Canada is going to be restricted by any combination of circumstances in the production of wheat for export to say 300,000,000 bushels the northern sections of Saskatchewan and Alberta will be at a distinct disadvantage in the production of wheat. If, on the other hand, we can produce or develop industrial uses for wheat of a low protein content, the northern section could produce wheat for industrial

use. It might be desirable from the point of view of agriculture that the northern sections should throw more emphasis upon the production of live stock which would, of course, mean more fodder feeds and more feed grains. I do not know, sir, whether that answers your question or not. But I would think because of climate and soil conditions that the northern sections of those provinces are at a distinct disadvantage as compared to the prairie sections in the production of high protein wheat.

May I come back to the question of costs of alcohol to which reference was made here a moment ago, the figure 40 cents per gallon being indicated. It is necessary to carry that cost out in terms of gasoline. If you have alcohol at 40 cents a gallon and if you take one-tenth and mix the alcohol with the gasoline to the extent of one-tenth of a gallon, you would only add 4 cents, even on the basis of that cost, to the cost of the gasoline; and you would be producing a high octane gasoline. So on the basis of gasoline I do not think we have anything to fear. It might not have been a bad thing if in the last two or three years instead of having a heavy carry-over of a wheat surplus we had converted some of that into alcohol and in that way we would have increased the available supply of gasoline in Canada by 10 per cent; and you can see that that might have had a considerable effect in respect to the present position of gasoline supplies.

Mr. McNIVEN: The alcohol would have the effect of raising the octane content?

Mr. MACNICOL: But if you raise the gasoline up to 100 per cent octane rating you would also have to produce hydrogen to use in combination with it.

The WITNESS: I am not talking about 100 per cent—from two octanes—in fact what we normally call for automotive purposes and high test gasoline.

Mr. McNIVEN: Take a 60-octane gasoline and blend it with 10 per cent of ethyl alcohol and you can raise the octane rate of that gasoline to 70, but that is accomplished at the present time by the infusion of tetra-ethyl of lead, and the price of your gasoline blended with tetra-ethyl of lead is from 2 to 3 cents a gallon, possibly 4 cents, cheaper than blended with alcohol. Have you any information that will throw any light on that?

The WITNESS: No, my only information is that by adding alcohol to your gasoline you increase your octane content from what we call normal standard grades of alcohol to high octane gasoline or anti-knock gasoline.

*By Mr. Bence:*

Q. You believe that if we can work to keep a product that can be used it might be better than putting the money into the production of something that cannot be used?—A. I think it is worth thinking about.

Mr. Ross: How many bushels of wheat would be used supposing we produce all our alcohol in Canada from wheat? What quantity did we use?

Mr. McNIVEN: Twelve million gallons was our industrial production prior to the war.

(Mr. McNiven, the Deputy Chairman, occupied the Chair at this point).

Mr. Ross: Twelve million gallons is the full consumption of Canada?

The DEPUTY CHAIRMAN: It is the full production.

Mr. Ross: Do we import as well?

The DEPUTY CHAIRMAN: At the present time our entire distillery capacity in Canada is devoted to the production of industrial alcohol, and not only is that sufficient for our industrial purposes including the manufacture of explosives, but we are exporting quantities of alcohol to the United States.

Mr. Ross: What quantity do we use under normal conditions?

The WITNESS: I think what you are trying to get at is what our total consumption of gasoline in Canada is.

Mr. Ross: Of alcohol.

The WITNESS: If you add 10 per cent of alcohol to that total consumption of gasoline, you want to know how many bushels of wheat would be required? I do not know what the total consumption of gasoline is. I do not know what 10 per cent of that consumption would be. But if you could determine what 10 per cent of that total is and figure it out on the basis of 2 gallons to a bushel of wheat you would get a total, possibly.

The DEPUTY CHAIRMAN: Your peace time consumption of gasoline was about 800,000,000 gallons.

Mr. MACKENZIE: We had one of the staff of the oil controller here a couple of weeks ago and I asked him about the production of synthetic rubber if we were using petroleum instead of alcohol produced from wheat and he said that the productive capacity of all the distilleries in Canada would only use about 5,000,000 bushels a year. That would agree with what Mr. McNiven said, that they are producing 12,000,000 gallons. It is about 2 gallons to a bushel of wheat. That compares very closely with what he said. He spoke of the difference in cost. They know now the difference in cost of synthetic rubber produced from alcohol and produced from petroleum. That is a difference of about 10 cents a pound in favour of the petroleum. But he said that that is not the reason they established their present process in Canada; the reason was that after Pearl Harbour when the United States went into the production of synthetic rubber very heavily the only two processes known and used extensively were those using petroleum, and he said they were in such a hurry—

Mr. MACNICOL: That is one; what is the other?

Mr. MACKENZIE: That is the reason. There are two processes, and both processes were based on petroleum; and because they wanted to get into production in such a hurry they could not wait to do any further experimentation.

Mr. MACNICOL: Before the Senate committee in Washington the same line of questioning and argument came up which is coming up here now, as to whether agricultural products or petroleum would produce the base of rubber more quickly. I have here what Donald Nelson, Chairman of the War Production Board at Washington said under date July 6, 1942.

The DEPUTY CHAIRMAN: Do you know the page of that report that you are quoting?

Mr. MACNICOL: I am quoting from a statement issued by Mr. Monahan which quotes Donald Nelson, the Chairman of the War Production Board at Washington, under date July 6, 1942, and this statement was given before the Senate committee. He said:—

There is certain evidence which I can introduce to you that immediately we started surveying every one of these propositions to make alcohol out of grain, with Publicker, with Seagram's—we started with Dr. Weismann, a man in whom I have great confidence, I talked to him last Thursday—I think he could tell you the complete story to-day after a full and complete investigation—he will be here Wednesday, if you would like to see him. To-day, after talking with him I am convinced that if I were starting that programme over I would start with 60 per cent from alcohol from grain and 40 per cent petroleum. That would be my judgment, viewing it to-day, from what I know of the picture.

Now, they too were working on the basis of petroleum, but after much investigation, Donald Nelson, Chairman of the War Production Board, made that statement, according to that report which I have here. That being the

case, I cannot see any argument whatever against using western wheat in a much larger way even if it means putting up more distilleries, if it is necessary to expand capacity of plant to produce sufficient alcohol from western grain—ordinary western grain, Canadian-grown grain—to produce the base of rubber. Mr. Chairman, we should make some effort to see that our Canadian producers have an opportunity to have their raw products used for the production of our finished requirements.

Mr. Ross: Mr. Donald Nelson does not say why he would use 60 per cent from wheat. It may be because he could get so much quicker results or because it would be cheaper. We do not know the reason. Could we not get that man up here—I do not mean Mr. Nelson, but the other man who was mentioned there.

Mr. MacNICOL: I was going to suggest that; that is vital. Why should we not communicate with the Senate committee at Washington and ascertain whether we can have come to Ottawa one or more of those men who evidently are qualified to tell us all the advantages of producing alcohol for the production of the base of rubber?

Mr. MacKENZIE: Don't you think we might try some of our own men?

Mr. MacNICOL: They say they are not in Canada.

The DEPUTY CHAIRMAN: Dr. Cook of the National Research Council and Dr. McFarlane of Macdonald college at St. Anne could be called.

Mr. MacNICOL: If we have such men in Canada we should get them from Canada. I was under the impression from what the witness said that we have not anyone qualified to speak on this.

The WITNESS: May I correct any misunderstanding in that way. We have scientists here who can discuss the general programme or the policy with regard to the process of converting cereal grains into alcohol; what I say is that agriculture itself has no chemical engineer who can, on the basis of actual operation determine what the costs are.

Mr. BENCE: In competition with the petroleum interests, they have not got the information to put up their story?

The WITNESS: Exactly.

The DEPUTY CHAIRMAN: When we made representations along the lines you have indicated to the authorities we were told that there was not sufficient strategic materials or metals available to build these plants in western Canada. It takes miles of pipe, copper and lead.

Mr. MacNICOL: The unfortunate thing, Mr. Chairman, is that we can get pipe for some things but apparently not for making more alcohol from wheat. I take the stand now that if the west is going to be helped it can only be helped in this way, and if it must be helped through this war then let us use the war to help the west. The materials can be got if necessary.

Mr. BENCE: In that connection I desire to point this out, that in the first place material is being obtained to establish a plant at Sarnia for the production of synthetic rubber made from petroleum, and, secondly, my information is that at the present time they are constructing a special plant at a place called Thorold, Ontario, for the production of petroleum alcohol. They must have materials for the erection of those plants. I want to mention this fact, that someone mentioned figures in connection with the production of industrial alcohol in Canada, and actually last year we produced only 1,400,000 gallons of industrial alcohol from wheat; this year they are going to produce 14,000,000 gallons, which indicates that this can happen and apparently can be done on a basis that is going to be useful to the Canadian government's needs in the war effort.

The DEPUTY CHAIRMAN: The figure I gave you was for peacetime needs.

Mr. BENCE: The total amount of alcohol manufactured in Canada in 1942 was only 5,450,000 gallons.

Mrs. NIELSEN: Apart from the fact of the value in making rubber, my understanding is that synthetic alcohol is the base for nearly all the known plastics at the present time, and the plastic industry is something which, if developed, would provide employment for a great number of our people in Saskatchewan through the winter months. It would supplement the income of the farming people who live in the northern areas and whose income from farming itself is not sufficient to guarantee them a living throughout the whole year. It seems so essential that we push this matter, apart from the question of the rubber industry, because synthetic alcohol is the base for so many other industries which will be of great importance to Saskatchewan.

The DEPUTY CHAIRMAN: Mr. MacKenzie has made a number of observations with regard to the presence of alcohol and I wonder if he would care to make any observation with regard to Mrs. Neilsen's statement concerning plastics?

The WITNESS: Mr. Chairman, I am very glad that Mrs. Neilsen has raised the wider question, and frankly I would hope that your committee would look at this problem from the long distance point of view as well as thinking of it in terms of war essentials. I cannot help but believe—I am making a reference to fuel oils—I cannot help but believe that the world picture in respect to fuel oils is going to constantly change, if the estimates made by authorities in the United States now are correct, that their known reserves of petroleum will only last fourteen years. It must be equally correct that every country in Europe faces the same situation. There may be new sources, new fields found; but in this old world of ours we are facing a situation in which you are going to have a steady diminution in the known supplies of petroleum, and it is equally certain that we are going to continue to live in a mechanical world in which we shall have to have power of some kind. Therefore, we have to begin now, I think, logically to think of all Canada's sources of supply, and translated into conditions of fifteen or twenty or fifty years from now it may present an entirely different picture to that which we see facing us at the present moment.

Now, before coming directly to plastics, I would hope too that the committee would give some thought to the general problem. There is the field, for instance, of vegetable oils. I do not need to say anything to you about the position Canada faces now in respect of edible oils by reason of the conflict in the far east, and from information that has come to me I believe that condition is likely to become more difficult. Dr. McFarlane, of McGill, told me not long ago that he thought they had developed a process that would permit the use of linseed as an edible oil, to convert it into an edible oil. If that is true, and we think of the edible oil needs of Canada, you can at once visualize what that would mean to the flax industry of Canada, if we can convert linseed oil into edible oils.

There is also the question of the production of rape seed, sunflowers. There is no question but that we can grow sunflowers in western Canada just as you can in the east, and sunflowers produce a very fine type of edible oil. There is soy bean production which only a very few years ago seemed like a dream, but it is now beginning to blossom out into a reality in this country. Similarly, the question of fibre crops demands some attention. I do not know what the position of Canada will be if this war lasts two, three, or four years in respect to the production of binder twine and the heavier cords, and so on. It might be that we should be giving some thought to the production of fibre flax and hemp and things of that kind. We can grow them.

*By Mr. Bence:*

Q. Can we grow them in western Canada?—A. Yes, we can grow hemp admirably on the Portage plains.

Q. And fibre flax?—A. Yes, I think we can grow fibre flax although there are some people who disagree with me on that. Then there is the whole field of plastics. These same gentlemen told me in the United States Chamber of Commerce a couple of weeks ago that the better grades of iron ore in the United States may be pretty well exhausted in the course of a few years.

Mr. MacNICOL: In fifty years all high grades will be exhausted.

The WITNESS: If that is true it means that there is going to be an entirely new implication placed on the use of plastics. In Winnipeg two or three years ago I saw wallboard produced from wheat straw. We had a couple of contractors who were ready to sign up for \$50,000 in orders but unfortunately the man who owned the process had very little understanding of business administration and no arrangement could be made with him for its production, but one can see quite easily that with this demand for substitutes for basic materials we may find springing up across this country more processing plants engaged in that type of production. What does that mean? We have in southern Manitoba an area settled by Mennonites and a few years ago when you went into those villages you would find the streets crowded with young men who had no occupation because under the system that they were then farming they needed a comparatively large unit of production. Corn was introduced into that district; sugar beets were introduced to that district, and some experimental work is now being done with sunflowers and soy beans. The immediate result of that change in the character of the production is that it has broken down the size of the farm unit. As a consequence of that there are no unemployed in that district. These young men who had no place to go prior are now operating their own farms. That represents a picture that I visualize in fifteen or twenty-five years, and I cannot but believe, Mr. Chairman, that what we need in this country to-day is some imagination, some capacity to project our minds ahead fifteen or twenty years and visualize the objective towards which we are going to work.

*By Mr. MacNicol:*

Q. And the urge to do things?—A. Yes. All that must be based on the development of scientific study and scientific research and I hope that this committee will take occasion to draw that to the attention of the government. When you come into the field of plastics frankly I do not know what can be done in western Canada. We have individuals who have a flare for breaking elements down and throwing them together in new combinations and they have produced some remarkable evidence of what can be done in the field of plastics, but again we have had no commercial attempt to do these things. I cannot express any final opinion as to the possibilities of it.

*By Mrs. Nielsen:*

Q. Would your idea be, Mr. MacKenzie, that because of the lag in private initiative or private enterprise in this direction that it should be part of the government's duty to investigate and to set up industries under state control rather than let the thing lapse?—A. I would say that it is quite a proper function of any government to develop research work that is necessary to establish the essential facts.

*By Mr. Castleden:*

Q. Continuing there, from the viewpoint of the farmer all these scientific developments and all the advances that are being made along the lines of synthetic rubber, and so forth, are not going to benefit agriculture any unless we are

going to take steps to see that he is guaranteed his cost of production for the goods he sells, and to have us talking here about sixty cent wheat when the cost production parity price in the United States is \$1.40, unless we are going to view this from the standpoint of the farmer and say, "At any rate, he must be guaranteed his cost of production", we are not doing very much for agriculture except relegating it to a position of constant debt and penury because he cannot go on producing wheat at sixty cents a bushel. How can we guarantee to the farmer his cost of production which you yourself say is very important to his welfare?—A. I would say it is axiomatic that the farmer must get a price that will permit a reasonable standard of living. I do not feel there is any need to argue there. I think that is axiomatic.

Q. But he has not been getting it in the past. I think that is probably the cause of his plight, and I cannot see that anything is being done to see that it will be remedied in the future.—A. There was a combination of circumstances in the thirties, for instance, that definitely left the farmer without his cost of production. I am not so sure that is true in the last two or three years because we have had an adequate market with an established competitive price which I think gives the farmer a reasonable return. Just how we are going to maintain that in peacetime I think demands very careful thought, but I would say that nothing less than that will suffice to meet the needs of agriculture.

*By Mr. Bertrand:*

Q. Leaving the question of wheat aside are you of the opinion that the return to the farmer for the commodities that he produces throughout Canada is at a sufficiently high level to assure him the standard of living that we are now speaking about?—A. If you are speaking in terms of present prices I think the evidence is that agriculture is gradually getting back to a reasonable standard of living. That brings up another question that has to be dealt with. I cannot speak with any knowledge of eastern Canada but there is hanging over agriculture in the west an over-burden of debt accumulated in the thirties that has to be dealt with in some way because the carrying costs of that burden are a terrific strain on even present production.

Q. That applies to the east as well as to the west, and reading over your presentation on Friday, May 7, you even specify it in eastern Canada; you state that in Ontario, for instance, it was very hard to deal with the debt problem due to the fact that many of these mortgages were due to individuals and not to corporations, and that condition still exists. As far as that is concerned I think the financial situation in many cases is not any better for the farmer in the east than for the farmer in the west although we may have heard more about it in the west because they were better organized to do so while the individual here is trying to hang on. The problem may not be quite so apparent but it is there.—A. If I recall the reference that you refer to I was speaking about the provisions set forth in the legislation introduced in 1939 by the Hon. Mr. Dunning providing for the setting up of a mortgage loan bank, and that provided for only dealing with those who had contracts with mortgage companies, and it failed entirely to meet the situation in eastern Canada by reason of the fact that most of the mortgages were privately owned and therefore some amendment or some modification of its provisions was necessary.

Q. Following the farmer's problem just one step further, in my opinion it is all very well to say that research work is all that one can do, that this is a long view for the future and probably for the other generation, but you have given figures the other day that stand out immediately as one of the problems we will be confronted with probably sooner than we expect. In Canada the agricultural population has produced in 1941, the year that you have given as the best in which to speak of this, \$1,379,000,000 worth of goods in round figures. Out of that \$382,000,000 was exported which means that over 25 per cent of the

farmers' income in the dominion of Canada has to be relied upon from other countries so we cannot very easily and economically speak of one problem which will be ours without taking cognizance of what is going to take place in other quarters in so far as export markets are concerned. When speaking of a standard of living, adjusted through machinery of government, governments are not so stable that we can say we will have any kind of cogs that will fit in, but what will be done must take cognizance of the problem that will face the whole world after this war. There is no doubt about that. The Atlantic Charter states clearly the whole thing, and unless we want to step out of it we have got to stay in it. I feel that in reading the Atlantic Charter at times we do not read it from the point of view that some of our neighbours in other countries are reading it. We are thinking of a higher standard of living for ourselves and we think that the others are going to help us to get that higher standard of living in our country, but these are countries that have been devastated through the difficulties of the war. Probably they are thinking of it in terms of their own and they think it is going to be up to us to help them. There is one of the points we will have to start from if we want to establish something by which our people are going to be contented and bring them to something which will avoid not revolution—I would not like to say revolution, but a very great deal of dissatisfaction.

*By the Deputy Chairman:*

Q. You dealt with that last night?—A. Yes.

Mr. BERTRAND: Is your committee studying some of these international problems? We of the House only study what is the problem we are going to be faced with in our own country and apparently we cannot go beyond that. We are all for the men doing better after the war. Has the committee which you preside over given that point any consideration as far as agriculture is concerned?

The WITNESS: I would say this; we laid down as a basic fact we have got to develop an export market if agriculture is to live. That is basic. Everything we do in Canada by way of developing domestic markets is supplementary to the fact we have got to have an export market. I think the whole crux of the situation is the interpretation that will be finally given to clause 4 of the Atlantic Charter. The people of Canada have got to make up their minds what they intend that clause shall mean and how it shall be interpreted so that our representatives to the peace conference will express the needs of Canada and the people of Canada in that respect. As to the other phase of the matter, the immediate post-war situation that we will face will be the supplying of goods to the devastated countries of the world, perhaps even including Asia, in the matter of foodstuffs, in the matter of building equipment, building materials, in the matter of medicinal supplies, and so on and so on. I think we have got to determine how far we are going to be ready to help them in respect of these things realizing that perhaps by the establishment of good will and by the opportunity for negotiation that will then arise we can plan with them for the establishment of more permanent markets.

Mr. MCKINNON: I would like to revert to wheat for a moment. It has just been mentioned that the parity price of wheat on the Chicago market is around \$1.40.

Mr. CASTLEDEN: That is the United States government price, not the market price.

Mr. MCKINNON: Yes.

*By Mr. McKinnon:*

Q. As to wheat that we sell to the United States, and we expect to sell a lot more this year, what are we charging the United States for Canadian wheat we are exporting to them?—A. You had better call Mr. McIvor.

*By Mr. Castleden:*

Q. I understand that it is not being sold through the board?—A. I have no knowledge of that at all.

Mr. CASTLEDEN: There is a question on the order paper regarding that.

*By Mrs. Nielsen:*

Q. Mr. MacKenzie, I sometimes think that when we speak of farmers that term is a very general one. We cannot help but recognize that during the last, shall we say fifty years, the normal process of development such as takes place in any capitalistic nation has taken place in farming, too. We have on the one hand the smaller type of farmer with a half section—and this applies equally to the east and to the west—who is farming as a way of living and on the other hand we have also developed the large mechanized farm where farming has become far more than just a way of living. It has become an industry.

The DEPUTY CHAIRMAN: A factory.

*By Mrs. Nielsen:*

Q. More particularly in western farming with regard to wheat, and I think possibly with regard to milk and certain other of the farm products in the east that is true also, and I am wondering what your opinion really is with regard to the possibilities of the smaller type of farmer ever being able to compete and make a go of things when he has to compete with the larger mechanized unit. This committee is considering the question of re-employment of our men when they return, and I believe it is the objective of the government to settle a number of our soldiers on farms. If these men are placed on small—shall we say half-section farms—what do you think the possibilities are of them ever being able to compete either in the east or in the west with farming that is being developed as an industry by a larger unit and wherein competition between the two overhead charges are less on the larger unit farm because of the huge farm than they are on a small farm? There are many differences in the cost of production and it seems to me that we are up against a problem. What is your opinion about it? What possibilities do you think the small farm has in the future?—A. Mr. Chairman, it is very difficult, and the more I look at the picture and the more I try to review conditions agriculturally across Canada the more difficult I find it to dogmatize in respect of any one principle. I think it is basic first of all that through land surveys and classification we should secure a much more adequate understanding and appreciation of the productive capacity of relative districts. In many areas of Canada, particularly in the west as Mrs. Nielsen suggested, through the introduction of mechanized methods of farming your production costs are lower on larger units than they possibly can be on smaller units. Climatic conditions, soil composition, enter into that same picture, and that brings up the question of costs of production. I frankly do not know how anybody can determine the cost of production of a bushel of wheat in western Canada. I know this, that in the Red River valley of Manitoba by reason of soil conditions, climatic conditions, the general character of the country, you can produce wheat at a substantially lower per bushel cost than you can in the western half of Manitoba. You have got every variation in between. On a straight wheat production programme the farmer in the western part of Manitoba is more at a disadvantage in the matter of production costs than is the farmer in the eastern section of Manitoba. On the other hand, in the inter-lake country of Manitoba, which is not a wheat-producing country at all but which is essentially a livestock production area, a quarter-section as a unit of production is obviously out and there you would have to have at least a section and perhaps more to operate it on an economic basis.

*By Mr. Matthews:*

Q. Operated for what, livestock or wheat?—A. Livestock; the inter-lake country of Manitoba is essentially livestock. Then you come down to the province of Ontario to the area between Hamilton and Toronto, where you have got a very dense population relatively and a heavy consuming market for the protective foods, and I can quite visualize, without knowing anything about it, that a farmer producing vegetables and eggs and perhaps milk could make a fairly prosperous living on fifty acres or a hundred acres.

Mr. MACNICOL: That is right.

The WITNESS: So when you try to dogmatize on these things and say that you can lay down certain principles for agriculture that will apply with equal effect across the dominion of Canada I think you are trying to do the impossible. We have got to look at the basic fundamental facts that lie behind. I would say this to Mrs. Nielson, that if we can in the process of time develop distributive industries, processing industries across Canada, then I think you can gradually reduce your unit of production. You develop a more intensified form of production and you develop production in those lines that by and large produce the best living for the farmer. For instance, the protective foods by and large are a more profitable form of production in many areas than a straight grain growing proposition would be. I cannot do more than suggest these things to you, ladies and gentlemen, because after all I would not dare dogmatize as to what should be done across the whole dominion of Canada.

*By Mrs. Nielsen:*

Q. That was a pertinent question. I think you will agree on the fact that this committee has to decide as to where we can place people when they return, and the possibilities of giving returned men at least an opportunity of living?—A. I am quite in agreement with you, Mrs. Nielsen. As a matter of fact I think you have got to give more than that, if I may presume to suggest that. If you will think, for instance, of the production of the farms in Canada in the last three years I think they have made a tremendous contribution to the whole war effort of Canada. That increased production has been brought about even though there has been a steady diminution in the number of people employed on the farms. What has that meant? It has meant that those left on the farms—and I could give you the actual names of several of my old neighbours at home, men 70 years of age or more who thought they had retired ten years ago and who are back rendering ten, twelve and fourteen hours of labour a day to meet that situation—have responded.

The DEPUTY CHAIRMAN: Nobly.

The WITNESS: I think that the whole picture has got to be faced. When you come to the problem of immigration what are we going to do with the people we bring to this country? If the farmers of Canada with a diminished number of helpers have increased the total production of agricultural commodities in this country to the extent they have done in the last three years and then after the war is over you add substantially to the number of workers and lose any of this market that we now supply overseas—

*By Mrs. Nielsen:*

Q. There will be a serious deterioration in income?—A. We are going to slip right back into the depression of the thirties.

Mr. MACNICOL: Unless we process more of the materials that we produce in Canada.

*By Mr. MacNicol:*

Q. I was going to ask a while ago if you have any figures on the relation of the cost of production of alcohol from wheat and from potatoes?—A. No. I think perhaps the best man for this committee to call on that subject would be Dr. McFarlane of McGill who, for our national chemurgic committee, has visited regional laboratories in the United States and has contacted many of the industrial plants over there. I think he could give you the best information available in Canada on that particular question.

Mr. BLACK: Mr. Chairman, I do not think that the witness gave a direct answer to Mrs. Nielsen's question as I understood it, and that is whether there was a future possibility for the quarter-section or half-section homesteader or farmer out on the prairies in competition with the larger mechanized farms? Thousands and thousands of people moved from eastern Canada and took up quarter-sections in the west years ago. The question arises now, and it is a very important question, whether there is any possibility for such a homesteader or purchaser of a quarter- or half-section to survive in the west in the production of grain in competition with mechanized farms. I would like to get an answer from Mr. MacKenzie to that question which I understand was the direct question put to him by Mrs. Nielsen.

The WITNESS: Mr. Chairman, I assure you I do not try to evade anything. I am glad to give you my opinion for what it is worth. I would say if you think in straight terms of wheat growing, no. If you think in terms of diversified agriculture, yes. The diversification of agriculture, the extent to which that will develop, will depend very largely on the policies laid down by the governing bodies of Canada.

*By Mrs. Nielsen:*

Q. Mr. MacKenzie, not altogether; diversified farming in the west depends a great deal on the nearness of markets. We have not got the big cities in western Canada to which to send poultry, eggs, butter, cream, garden stuff and all that such as the eastern farmers have.—A. Again, Mrs. Nielsen, perhaps I should qualify it to this extent, that I would think that your average half-section farm, for instance in northern Saskatchewan, has a much better chance of succeeding by developing the livestock branch of his endeavours whilst trying to grow straight grain. The great wooded soils of northern Saskatchewan will not produce wheat very long without running into a lot of trouble, but I do think they will produce livestock, dairy products and so on; and the trend is definitely in that direction. Now, the half-section farmer is definitely at a disadvantage as compared with our section farmer living within a range of say twenty-five miles from Winnipeg, where he has an excellent market for his whole milk. Your Saskatchewan farmer has not got that. I find it exceedingly difficult to make a positive statement that will apply equally in all the various sections of the country, because there are so many facts come into the picture.

Mr. MACNICOL: Just on the point there of milk, why wouldn't it be well for the western farmer to go into the production of powdered milk? He would have almost as good a chance as any other farmer because the freight on powdered milk would be a mere bagatelle in comparison to what it would be on a gallon of milk.

The WITNESS: That all depends on the competitive market that is available for the powdered milk. I do not know what market will be available when the war is over.

The DEPUTY CHAIRMAN: But in any event he would come into competition with Borden's.

Mr. BENCE: And now Mr. Chairman, if I may, I would like to ask a few questions in connection with the matter of oil, with particular reference to the production of flax for lubrication purposes. When you made the statement you did to my friend here, you referred to the fact that because of the cutting off of imports from the far east that we had extended our research into the matter of the production of vegetable oils and so on, and that very satisfactory progress was being made with respect to converting linseed oil into something that would be edible. What I am coming to is this: do you believe that if we established an expensive system of factories and plants to process the oil that we can produce in this country from the soya bean, sunflower seed and flax—that we can continue to use these plants in the same capacity in peace time; or do you believe that we will return to the position where we were before the war, that of importing a lot of these vegetable oils from the far east?

The WITNESS: That again I find difficult to answer. I do not know, for instance, what the situation in the far east will be; what measure of devastation has taken place. I do not know what demands may develop in the far east itself for oils. I am not able to say what will be the position of India and China, for instance, who are now becoming so highly industrialized by reason of war requirements, and what that will mean, whether it will result in a raising of their standard of living. And now, if such be the case, then there will be an increased demand for the oils in the far east. If that is true then we are going to have a Canadian demand that will warrant our going into these things. I know that we can grow them. I know that we lack to-day the crushing facilities, the oil extracting facilities in this country. It seems to me to be purely nonsensical to grow the sunflowers in Alberta and send the seed away down to Hamilton to have it processed.

Mr. MacNICOL: I agree with you there.

The WITNESS: Because moving it to Hamilton in bulk involves a freight rate that is so high as to make it prohibitive to grow it in Alberta.

*By Mr. Castleden:*

Q. May I ask you this question: Have you ever discussed this matter with Mrs. Turner, the Oils Administrator?—A. No, personally I have not.

Q. I asked that for this reason, because I understand she takes this stand: that in the first place there is in Canada sufficient crushing capacity at the present time and she does not advocate any extension of it; and, in the second place, that if there is any extension of it, she advocates that it should be in eastern Canada. You would not know of any reason for her taking a stand such as that?—A. I do not. Might I just interject; there is another phase that comes into this picture—I may be wholly wrong in this—but I see there is large industrial development in the United States under government provided capital, and when this war is over a lot of that capital is going to be written off very largely, and here are industries already established with very little in the way of capital investment, and how is a company in Canada going to be able to compete under those conditions; and, are we going to be content to be hewers of wood and drawers of stone just by reason of the fact that we have failed within the last two or three years to establish industries of this kind.

Mr. MacNICOL: You mean, we have missed our opportunities; I agree with you there. I was going to suggest, Mr. Chairman, that we should call Mr. Joe Harris, M.P.—he is a member of this house—who is, I believe, the best available authority on the question of vegetable and animal oils—I mean vegetable oils in Canada. I think we should invite him to come before this committee and he could perhaps tell.

Mr. BENCE: Mr. Chairman, I would like to make a suggestion that we consider the desirability of asking the Fats and Oils Administrator to come

here and discuss these various matters with the Committee. I may say that, speaking for myself, there are a number of questions I would like to ask her.

The DEPUTY CHAIRMAN: When Mr. MacKenzie was speaking I was thinking of Mr. Harris and that gentleman's advocacy of higher tariffs in order to keep out these oils from the far east; and I was just wondering if we were going to implement the principles of the Atlantic Charter if we adopted such a policy, one which demanded higher tariff production for the development of new industries in our own country.

Mr. MACNICOL: I had no recollection that he referred to the tariff phase of it at all. I just thought that he was fairly well posted on this matter of the production of oils.

Mr. BENCE: This whole matter I think should be approached from the angle of what is the most feasible thing for this country; and if it is more feasible to produce vegetable oils in the manner we are now developing and considering, now that the supplies from the far east are cut off; I think we should give consideration to the question of economic advantage of developing an industry of that type right here in Canada.

Mr. MACNICOL: That is why I mentioned Mr. Harris. He is one who has had a great deal to do with the production of oils, fats and things of that kind.

The DEPUTY CHAIRMAN: Was he not concerned more with animal fats?

Mr. MACNICOL: I believe you are right there. At the moment the western provinces have gone into the production of cattle and hogs to such a tremendous extent that they are outstripping even our own province of Ontario. One result of that is that after the war there will have to be some way provided which will permit the western farmer to continue producing hogs and cattle; and that all comes back again to the point made by Mr. Harris—he is one who has made a special study of the subject, and he is thoroughly familiar with it.

The DEPUTY CHAIRMAN: Mr. Bence, I think you wanted to ask some questions in regard to flax.

Mr. BENCE: I asked that question and Mr. MacKenzie gave me the answer; and as I understood it it was that he could not understand why this work should not be done in western Canada. I do not know that I have any further questions to ask in connection with that.

The DEPUTY CHAIRMAN: Mr. MacKenzie, one of the results of your address last evening was that half a dozen of the members sitting around here to-day had porridge for their breakfast this morning.

The WITNESS: That is quite interesting, Mr. Chairman.

The DEPUTY CHAIRMAN: And one of the by-products I understand is oat hull, which is the basis for the manufacture of ferferal; can you tell us anything about ferferal?

The WITNESS: No, I cannot. I know that ferferal is a product of the last few years and very, very substantial quantities of oat hulls and corn husks and that type of thing in the United States have been used for the purpose of producing ferferal; but, as to the nature of the produce, or its use, I cannot tell you anything about that.

The DEPUTY CHAIRMAN: Is it not the basis for the manufacture of paints and cosmetics?

The WITNESS: It is used in that type of thing—but I am not a chemist.

*By Mrs. Nielsen:*

Q. I want to refer for just a moment to this question of the farmer who is settled on a quarter section or half section of land. I know something of

the situation which has developed in Saskatchewan. I know something about the settlement of the people from the dried-out areas of the south who were brought up and settled on new land in new homes in the northern part of our province; and I know something of the way it has worked out, even with the assistance given by the government in equipping these farmers with new implements and seed and so on which they need to carry on their farming in the new localities to which they were moved. I also know that in a number of cases these families have not been able to carry on and they have had to simply pick up and move on because it was impossible for them to carry on. I wonder what your opinion would be, Mr. MacKenzie, of the attitude of some of these men who will be returning, if when they come back instead of being settled, each man on one quarter section and the government providing the rehabilitation services with the necessary machinery and a couple of horses, and so on; if instead of that twenty families were settled on the larger area of land and the government provided one good set of machinery that would be adequate to operate the whole area, and if the families there had their homes instead of settled all over each in his own quarter section, they had them together in a kind of little village or more or less close together—

THE WITNESS: You mean, in a community?

MRS. NIELSEN: Yes, a community on a cooperative basis, and that they worked that whole section: do you think that in that way the general living of these families would be better and the expenditure less than it would be trying to settle them each on an individual place?

THE WITNESS: To the extent that that could be done, Mrs. Nielsen, I would say they could keep their capital investment down. For instance, instead of ever buying a combine or a thresher if they were to cooperate and buy or that number necessary to service the community they undoubtedly would keep their overhead down, and these men would have a chance of getting a very reasonable living. I do not know if the experience in Canada over the last 30 or 40 years will support the idea that you can start the communities of that kind over a period of years. We are all such rugged individualists—we would begin to wonder whose crop is going to be threshed first—

MRS. NIELSEN: No, it would be the total crop that would be threshed; they would have all a share in the total crop.

THE WITNESS: I see what you have in mind, instead of each individual operating his own you would have it a co-operative community?

MRS. NIELSEN: Yes. Do you not think that by such an arrangement they would be in a position to compete with a large mechanized farm, owned perhaps by one private individual; and that in this way they would be able to get a little more for themselves and their families than they would if they were each to operate a small individual quarter section? It is just an idea, but I wanted to have your opinion upon whether it is feasible; whether it could be done or not remains to be seen, but there is an idea there surely.

THE WITNESS: I think unquestionably from the point of view of keeping down overhead and operating costs there is merit to it, undoubtedly. Whether or not a community to the returned man would be feasible, whether or not you could get him to live under a community system of that kind, I have no knowledge on that at all.

MR. ROSS (*Calgary East*): We have a number of such set-ups in the west already among some of these religionists.

THE WITNESS: Yes, the Hutterites and Menonites for instance.

*By Mr. Castleden:*

Q. Considerable of Mr. MacKenzie's evidence before the committee dealt particularly with the domestic market. During the 30's we saw Canada pro-

ducing a great deal and having a great deal of food requirements—good living—and many people in actual want; the fruit farmer growing plenty of fruits but the western farmer unable to buy it; and the western farmer growing grain when he could not sell even his barley at 6 cents a bushel, and not being able to get anything for his cattle, and the people in Canada needing it greatly. There must have been some very serious fault with the distribution system. Have you any suggestions to offer with regard to the solution of that problem?—A. Well, I think it is wise to recall just what happened in the 30's in western Canada.

Mr. CASTLEDEN: In all of Canada, I think.

The WITNESS: Yes, in all of Canada. First of all you have a world situation in which the whole price structure broke down. That would have been serious enough in itself, but in the west particularly we ran into a very serious drought condition, worse than we ever experienced; and strangely we had our infestation of grasshoppers at the same time, and you had a combination of facts enter into it that were without parallel in Canada before. And now, our distribution system had at least this merit that our good friends in Ontario very graciously supplied us with the necessary fruit supplies and so on that were exceedingly gratefully received by the west. But I do not know that you can blame that whole condition on any distribution system; it was a combination of facts that none of us could possibly control. If we had had only one of these facts it would not have been anything like as serious; but those of us who had a small crop by reason of getting a little moisture lost that through the invasion of grasshoppers; and anybody who did get a crop didn't get any return for it by reason of a world condition. Now, I don't know any distribution, in the ordinary accepted sense of the word that could have coped with this basic combination of facts that were present.

Mr. CASTLEDEN: How about the other angle of it; the people in those areas needed it but they could not buy the products; an effective market did not exist even basically for the goods we were producing within our own country?

The WITNESS: Yes. Well now, if we can achieve our declared objective to our post-war reconstruction, maintain for everyone an opportunity to earn for himself a reasonable standard of living and maintain purchasing power, then we will largely meet that situation. How well we will succeed, I do not know; but that is our declared objective at the present time. I would say this—if you would like to carry it further afield—if we could get the whole world living on a standard that the nutritionalists prescribe there will be no marketing problem for agricultural products.

Mr. BERTRAND: You certainly hit the nail on the head there.

Mr. CASTLEDEN: And again we are getting back to the question of purchasing power; who is going to supply the purchasing power?

The WITNESS: I do not know how you can supply China or India with purchasing power.

Mr. Ross (*Calgary East*): If you bring oil in from the far east, as you have done in the past, that oil would cost roughly in the neighbourhood of 3 or 4 cents; you would be permitting that oil to come in produced by people dressed in loin cloths to compete with our own people here in Canada. The result would be to put our Canadian people out of business.

*By the Deputy Chairman:*

Q. Would you care to make any observations as to the beet sugar industry?—A. Well, we are hopeful. Again I must speak from very limited knowledge so far as the sugar beet industry of Manitoba is concerned. Given reasonable climatic and crop conditions so that we can get a reasonable return per acre I think the industry in Manitoba will get along very well.

*By Mr. MacNicol:*

Q. Have you one or two plants that are now in operation?—A. One in Manitoba.

Q. There is one in southern Manitoba, and I thought that they had talked of building one in northern Manitoba; that has not been done?—A. No, not yet.

MR. MACNICOL: There were some other questions that I wanted to ask Mr. MacKenzie but time will not permit us adequately to discuss the matters I wish to take up.

THE DEPUTY CHAIRMAN: We have another ten minutes yet, Mr. MacNicol.

MR. MACNICOL: I think I would need to have at least fifteen or twenty minutes, and I could not do it to-day. What I have to discuss might possibly occupy the full session of the committee. I was going to ask Mr. MacKenzie to say something about the probable labour benefit—that is the objective of our committee, the providing of jobs—that would be secured through such things as rural electrification; and I would have liked to have asked him his views as to the amount of labour that would be employed through improvement in rural housing and rural sanitary conveniences, which he spoke about the last time; and also about some way of providing fair compensation for farm labour—but that would probably take up the whole sitting by itself.

THE WITNESS: Mr. Chairman, I think I might deal with that briefly in the few minutes that are left at your disposal. First I might deal with rural electrification; if we could extend rural electrification to 25 per cent of the farm homes in Manitoba in the next ten years—if we supply first of all the labour necessary for the construction of the lines in the electrification of the farm homes; and in addition to that the quantity of electrical equipment that would be necessary to the satisfaction of the needs of these electrified farm homes would be sufficient in my judgment to permit the establishment of one or two factories in Manitoba employing a number of men—I could not say how many. Then when you come to the renovation and modernization of the farm homes, the possibilities there are almost unlimited. There is another problem of the labour employed right in the home itself, the demand for labour saving devices and that type of thing in the home would be such as would keep the factories of Canada going for some considerable time. But it can be done, of course, only through assistance.

MR. CASTLEDEN: Again it is a matter of purchasing power, is it not?

THE WITNESS: Yes.

MR. MACNICOL: The government would have to provide it as was said before; such assistance could be provided by loaning money at a low rate of interest, and might I say over a period of 40 years. Do you think that would be feasible?

THE WITNESS: My only answer to that is, I think that is quite properly a service that the government of Canada could give to our farm people. I would like to see it done; and as I recollect it has been done in the past, the government of Canada supplying money over a period of 20 years repayable on some amortization plan. I do not think working out the details would provide any great difficulty, but the psychological consequences of it would be enormous.

MR. McDONALD (*Pontiac*): Could that not be done by the provincial government as in the case of Ontario with their hydro electric policy.

THE WITNESS: Possibly, but the provinces with their limited field of taxation would probably have to borrow the money from the dominion.

MR. MACNICOL: And that would make it possible for thousands and thousands of men to obtain jobs.

THE WITNESS: I think there is no limit to the number of men that might be employed; for instance, if you could develop a national campaign for the painting of farm homes and homes in rural towns—I do not know where you could draw

the line, but the demand for paint would be beyond the capacity of the paint manufacturers to supply, and you employ labour all along the line.

Mr. CASTLEDEN: Again, there must be purchasing power.

The WITNESS: Supplied in the same way through advances from the federal government repayable over a period of years.

Mr. MACNICOL: I think it has been worked out that a capital sum amortized over a period of 40 years at  $2\frac{1}{2}$  per cent would liquidate itself.

Mr. CASTLEDEN: There is one other problem touched on this morning which I think deserves a little more attention, and that is the matter of debt. Mr. MacKenzie pointed out that there were years there when the farmers were loaded down with two burdens; first of all, he received no return for his labour in the way of profits, and he also had placed upon him the burden of compounded interest on secured debt. Now, this is becoming a matter of immediate concern; possibly in the legislation of this house before the end of the session—have you anything in the way of offering something which would save that farmer his home against the almost insurmountable debt with which he is faced at the present time? What would you suggest in the way of doing something equitable, something in the way of assisting the farmer who is now faced with that burden? Many of them look upon it as a hopeless problem; but the sooner they give up and get away from it the better—they are just about ready to move off the land, and many of them have already done so, I think, in some areas of Saskatchewan where a considerable group of farmers have had to move off.

The WITNESS: The question of agricultural credit is a very large and a very difficult problem. There is first of all the provision for treating the accumulated debt burdens that are arbitrarily imposed by reason of no fault of the farmer himself. There is secondly the problem of long term credit; and thirdly, the problem of working capital. I do not know that I can say any more to you now than this: that I think it is fundamental that every burden of debt must be treated and brought into a proper relationship to the productive capacity of the land on which it has accumulated. And now, how that might be done is a matter for consideration. But I think we have got to realize that there are perhaps certain individuals who would be in a better position if they were given a chance to start somewhere else. We have again to realize that every farmer is not in himself necessarily a good risk; I mean, there are farmers just as there are business men and labouring people who are entirely lacking in any sense of business administration. I am thinking of a young boy that I know very well who got a very fine start farming from his father, but no training in business whatever; and in eight years he had accumulated \$10,000 of debt on his half section mainly because if he saw a purebred Belgian horse that he liked he bought the horse and gave a note for it; and thinking unconsciously perhaps that in giving the note he was paying for the horse. I mean, no system of credit will help that situation; you have got to do more than that. And I think one of the things necessary even from the point of view of credit is training among farm people provided by the state on the business side of farming.

Some hon. MEMBERS: Hear, hear.

The WITNESS: I do not want to minimize it, but we are laying the whole emphasis on the business side of farming. But the day has come I think, when the business man gives his son a commercial course in a university and I think through some agency we have got to make it possible to give our farm boys training in the business of farming; and in that way we can equip these boys to deal more wisely with the whole problem of financing farm operations.

Mr. McDONALD (*Pontiac*): In connection with farm credit, it might be of interest to this committee to know that in the last budget speech a short time ago the treasurer of Quebec cited figures relating to the operations of the

farm loan board of that province. That board was established three or four years ago, and he made the statement that out of 20,000 loans in the province from the time of the inception of the board down to the 31st of December, 1942, only 33 loans were in any way in arrears in connection with interest unpaid.

Mr. MacNICOL: That is the province of Quebec?

Mr. McDONALD (*Pontiac*): Yes, that is the province of Quebec.

The WITNESS: That is remarkable.

Mr. McDONALD (*Pontiac*): That is one of the provinces which have sought to aid the farmers through legislation, there it is done through the agency of the farm loan board; and that was his statement to the legislature, that out of 20,000 loans only 33 were in any way in arrears as of the date of his report; and he added that a good many of them have since been adjusted.

The DEPUTY CHAIRMAN: What rate of interest do they charge?

Mr. McDONALD (*Pontiac*): I think it is three per cent.

The DEPUTY CHAIRMAN: That is the rate for the Quebec provincial farm loan board?

Mr. McDONALD (*Pontiac*): Yes.

Mr. MATTHEWS: Mr. Chairman, before we adjourn I would like to express the thanks of this committee to the witness to-day for his having been with us on this second occasion. We have had men from the east and men from the west, each discussing questions from their own geographical viewpoint. I think I may say that the presentation which Mr. MacKenzie has made has been of a truly national character. He has not favoured the east or west. His thought has been, what is best for Canada? I have known Mr. MacKenzie for many years. I might almost say that I knew Mr. MacKenzie when he was a boy running around in rompers. I have heard him speak many times but I have never known him to consent to speak on any occasion unless he was well posted on the subject about which he was to speak. We may always rest assured that when he undertakes to speak on any subject he is an authority on that subject. I cannot help but think that we in this committee, privileged as we have been to hear so many witnesses of great repute, are a singularly fortunate group of individuals when I compare our sessions here, and the vast amount of information we receive, with some of the sessions we are compelled to attend in the House of Commons. Mr. Chairman, I think every member of this committee will join heartily with me in extending our sincere thanks to Mr. MacKenzie for being with us on this occasion.

Mr. MacNICOL: And if he should be in Ottawa at some future time we would like to hear him again.

The DEPUTY CHAIRMAN: The applause will indicate to you, Mr. MacKenzie, the appreciation of the members of the committee. We are indeed deeply grateful to you for having given us of your time and information. We will meet again in this room to-morrow at 11 o'clock.

The committee adjourned at 1.05 p.m., to meet again on Friday, May 28, 1943, at 11 o'clock a.m.







Doc  
2  
a  
SESSION 1943

HOUSE OF COMMONS

---

43-20 SPECIAL COMMITTEE

ON

# RECONSTRUCTION AND RE-ESTABLISHMENT

---

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 18

---

FRIDAY, MAY 28, 1943

---

## WITNESSES:

Mr. R. R. Jellett, President; Mr. P. A. McFarlane, Chairman of the Executive; Mr. D. L. Morrell, Secretary; and Messrs. C. Huggett, P. S. Fisher, D. G. MacKenzie, W. D. Jones, V. R. Smith, H. C. Hayes, Directors, the Canadian Chamber of Commerce.  
Mr. Robert A. Bryce, President, Macassa Mines, Limited.  
Mr. C. E. Gravel.  
Mr. D. P. Cruickshank, President, Steel Equipment Co., Ltd.

OTTAWA  
EDMOND CLOUTIER  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1943





## MINUTES OF PROCEEDINGS

FRIDAY, May 28, 1943.

The Special Committee on Reconstruction and Re-establishment met at 11 o'clock a.m., the Chairman, Mr. J. G. Turgeon, presiding.

*Members Present:* Messrs. Authier, Bence, Bertrand (*Prescott*), Castleden, Eudes, Ferron, Gillis, Jean, Mackenzie (*Vancouver Centre*), MacNicol, Marshall, Martin, Matthews, Nielsen (*Mrs.*), Poirier, Quelch, Sanderson, Turgeon.

*In attendance:* Mr. R. R. Jellett, President, Mr. P. A. McFarlane, Chairman of the Executive, and Mr. D. L. Morrell, Secretary, the Canadian Chamber of Commerce; Mr. C. Huggett, President, Canadian Industries, Limited; Mr. P. S. Fisher, Vice-President, Southam Company, Limited; Mr. D. G. MacKenzie, Chief Commissioner, Board of Grain Commissioners; Mr. W. D. Jones, Chairman, Board of Directors, International Business Machines; Mr. V. R. Smith, General Manager, Confederation Life Association; Mr. H. C. Hayes, McDonald, Currie and Company; Mr. Robert A. Bryce, President, Macassa Mines, Limited; Mr. C. E. Gravel; Mr. D. P. Cruickshank, President, Steel Equipment Company, Limited.

Messrs. McFarlane and Morrell read sections 1 to 5, inclusive, of the brief presented by the Canadian Chamber of Commerce and, together with other members of the delegation, were questioned thereon.

At the suggestion of Mr. McFarlane, it was decided that a rapid survey be carried out by the Chamber of Commerce to determine the probable capacity of industry to employ demobilized soldiers and war workers during the period of transition from a war to a peace economy; and that the delegation be given an opportunity to present their findings to the Committee.

Mr. McFarlane filed a booklet entitled, "The Problem of Unemployment."

At 1 o'clock p.m. the Committee adjourned to meet again at 11 a.m. on Wednesday, June 2, 1943.

A. L. BURGESS,  
*Acting Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,

May 28, 1943.

The Special Committee on Reconstruction and Reestablishment met this day at 11 o'clock a.m. The Chairman, Mr. J. C. Turgeon presided.

The CHAIRMAN: Ladies and gentlemen, we have a quorum present so we will start our proceedings now.

The Canadian Chamber of Commerce, who are before us this morning, have done a real job of work in connection with this brief. You have all had it some days ahead and we are going to hear their representations this morning in detail. The brief will be read by Mr. McFarlane and Mr. Morrell; I think the arrangement is that as one tires out another will take over and carry on. Then, the questions arising in respect to the various sections of the presentation will be answered by different members of the Chamber of Commerce delegation; and I thought we would proceed and have questions on the different phases as each phase is ended.

We are meeting today with members of the Senate Committee on Reconstruction and Social Security and I know we are all glad to have with us today Senator Lambert, the chairman of the senate committee, and quite a few other members of that committee. And, we have the Hon. Mr. Mackenzie, Minister of Pensions and National Health, with us; he has given great attention to this committee.

I want to explain to the President of the Chamber of Commerce, Mr. Jellett, and the members who are here with him, that the reason why we have so few members present today is because something over fifty of the members of the House of Commons have gone away on war work to look into some plants at Detroit.

And now, I am going to ask Mr. Jellett if he will perform his part of the presentation by reading to you the introductory letter.

Mr. R. P. JELLETT, called:

The WITNESS: Honourable sirs and gentlemen, on behalf of the National Board of Directors of The Canadian Chamber of Commerce, we have the honour to present to you the following brief. In doing so, we express our satisfaction that your committees are giving consideration to the important problems concerned with post-war reconstruction and also our appreciation of the opportunity to contribute to your deliberations.

The chamber is basically a voluntary association of some one hundred and fifty boards of trade and chambers of commerce in all the provinces of the dominion. Contained within the membership, also, are a number of national trade associations and over four hundred business enterprises, the operations of which are, for the most part, of a national character. Consequently, it is natural and inevitable that this large segment of our economy which is represented in the chamber, should play an important part in the restoration of peace-time life.

In directing its energies and skill to the problems that lie ahead, the chamber has launched a program of study and activity among its member boards and chambers and urged them to establish post-war reconstruction committees in their own communities. Moreover, the chamber will explore other avenues for coordinated planning, such as direct contacts with national trade associations and individual national corporations. This program, however, has not yet pro-

gressed to a point where a synthesis of business thinking can be completed. Nevertheless, on receipt of an invitation to appear before your committees, the directors decided to crystallize their views in regard to the principles which should govern our post-war economy. We assume that your hearings will be resumed at a later date and that the chamber will be given an opportunity to supplement and amplify this presentation in the light of changing conditions and after the receipt of views from the membership.

Respectfully submitted,

R. P. JELLETT,  
*President.*

P. O. McFARLANE,  
*Chairman of the Executive.*

D. F. MORRELL,  
*Secretary.*

The CHAIRMAN: Now, I understand that Mr. Morrell will start the presentation of the main brief. Do you wish the summary read, or shall it be taken as read?

Mr. MACNICOL: I would suggest that it be taken as read and that we go right over to section II of their brief on page 4; and then we can go ahead and ask questions on that section as soon as Mr. Morrell has finished presenting it.

The CHAIRMAN: That being agreeable to the committee we will ask Mr. Morrell to go ahead with the reading of that section of the brief. All the other material up to that point will be included as part of the evidence submitted before us this morning, it will be taken as read.

## SUMMARY

*This brief rests on six basic principles*

(a) We recognize that Canada has always lived by trade—selling abroad certain goods which we produce in addition to those required for our own needs, and in return, purchasing other goods from abroad.

(b) Only by selling abroad on this basis again, can we secure a balanced post-war economy. Failing this, we might be compelled to liquidate, in whole or in part, some of our export industries. Therefore, our prime purpose must be, together with our allies, to re-create a world market.

(c) If we cannot re-create a world market, we can scarcely hope, either, to give Canadians freedom from want and the fear of want. But this is our post-war objective.

(d) To reach that objective, we need the largest possible production of the good things of life. Practical considerations should determine the respective spheres of government and business. To perform its indispensable part, business needs a large restoration of freedom.

(e) Ill-health, unemployment, ignorance and industrial strife, are evils to be banished. We should eradicate their causes, instead of endorsing patchwork remedies.

(f) We should aim thus at producing a better race of men and women. As regards health, intelligence and initiative, Canadians should be second to none in the world.

*The brief therefore suggests*

1. Certain measures intended to raise human standards directly:

(i) By the rehousing of the people;

(ii) By the raising of nutrition standards, among youth especially;

- (iii) By the creation of wider educational opportunities, both for children and adults;
  - (iv) By the prevention of mass unemployment;
  - (v) By the provision of insurance, on a national scale, against the still unavoidable mischances.
2. Certain measures intended for the betterment of Canadian agriculture:
- (i) By plans for the marketing abroad of our foodstuffs in the post-war world;
  - (ii) By campaigns directed to raising the demand for "protective" foods in Canada;
  - (iii) By fostering the production of synthetics, based on farm products;
  - (iv) By measures directed towards soil and water conservation and forest management; and in conjunction with these, a national soil survey;
  - (v) By the development of more experimental and research facilities, using the soil survey;
  - (vi) By more widespread education in agricultural methods, and the vocational training of youth interested in agriculture;
  - (vii) By planning on a community basis, the land settlement of the future.
3. Certain measures intended for the betterment of Canadian industry:
- (i) By plans for the short-term stabilization of employment, using in the first phase of peace,
    - (a) expenditures by government, on public works, conservation, and town planning schemes; and
    - (b) measures to stimulate the rehousing of the people;
  - (ii) By plans for the long-term stabilization of employment—basically through the maintenance, at a constant rate if possible, of private investment in capital equipment; and also through public finance and monetary policies conceived to this end;
  - (iii) By the gradual removal, as fast as may be possible, of restrictions on the freedom of Canadian business to produce goods and dispose of them;
  - (iv) By the development of better relations between management and workers, including,
    - (a) considered plans for enlistment of the workers' interests in the process of production—through the general adoption of works councils and production committees, among other things; and
    - (b) development of a national labour code, to govern the relations between management and organized labour;
  - (v) By the finding of additional markets abroad, for the products of those Canadian manufacturing industries which have been much expanded in war-time, but are capable of serving peace-time uses.

The brief concludes by suggesting an over-all examination of the Canadian tariff, and of Canada's taxation structure as a whole. The purpose of this examination would be to find and remove anomalies which might otherwise hinder us in reaching Canada's post-war objectives. ✓

The National Board of Directors of The Canadian Chamber of Commerce welcomes this opportunity to present before the joint session of the Parliamentary Committees on Reconstruction, Economic Re-establishment, and Social Security the results of its own deliberation on this group of problems.

This report deals with Canada. The problems are Canadian problems. Nevertheless we have endeavoured to visualize them, and to make certain recommendations regarding them, in the light of declared purposes which our united nations hold in common.

## I. AGREED OBJECTIVES

*The Four Freedoms*

1. Beginning as a battle for self-preservation, this greatest of wars was forced on all freedom-loving peoples by men whose fixed purpose it is to destroy freedom.

The freedom-loving peoples began to defend themselves, scarcely pausing to reflect at first on what "freedom" really means. But this was not for long. Even as our battles were being fought, we have gradually defined and elaborated a joint conception of freedom which (we take for granted) is the proper foundation of all plans for the post-war world.

We have come to realize, as distinct but related objectives for mankind, the four freedoms enunciated by Mr. Roosevelt: (i) freedom of speech, (ii) freedom of religion, (iii) freedom from want, and (iv) freedom from fear. None of these are negative conceptions. They cannot be secured merely by repelling attacks on them from outside our borders. They represent a series of positive goals; not yet, however, even in Britain or in the British dominions or the United States, have they been enjoyed in their entirety.

It is not therefore any part of our desire to restore pre-war conditions. We look, instead, for the creation of better conditions for all men.

*Aiming at Abundance*

2. In the nineteenth century, relatively scant attention was paid to the third of the four freedoms. Only within living memory did there appear a firm resolve on the part of the governments and peoples alike, to create freedom from want and the fear of want. All of us are aware that efforts to this end have been far from successful hitherto. Want and the fear of want were widespread during the decade which ended in September, 1939.

The general agreement that these dark clouds on the Canadian citizen's horizon must not be permitted to return, has recently been crystallized in two proposals: the first, that an all-embracing state scheme of social security be now prepared and implemented as soon as possible; the second, that measures be taken to guarantee the maintenance, in peace-time, of full employment.\*

---

\*This expression bulks so large in current political discussion, and is used so freely without definition that it contains an element of danger. The following quotations are not inapt:

*Economist*, October 3, 1942.—"What, in a peace-time context, is full employment? Full employment does not mean the total disappearance of the unemployed. As usually understood, it is quite compatible with the continuance of 'normal minimum unemployment'—that is the men and women who are changing their jobs and drawing (unemployment insurance) benefit for a week or two in the interval. Indeed, it is imperative for the elasticity of the national economy that there should be a substantial degree of mobility of labour, and not every change of job can be expected to be accomplished between night and morning. Full employment is also compatible with a certain degree of seasonal unemployment."

*The Problem of Unemployment*, Lever Brothers Limited, April, 1943:—

"There is a misconception which is only too common, namely, that full employment, in the sense that every worker is employed full-time for the whole of the year, is the desideratum to be aimed at. Apart from the fact that such a situation is far from natural and has never characterized the periods that were the happiest for the working population, it would be impossible to keep economic life continuously at such a pitch. It is a situation which has existed only at the top of a boom or in wartime. The government, in aiming at regularizing economic life, should never aim at regularizing it at top speed. The social machinery cannot stand this continuously any better than other machinery can. Regularizing means establishing a more or less lasting situation—unavoidable interruptions apart—which is only possible when the productive capacity, both in men and machines, disposes of a certain reserve."

In other words, the term full employment really means the prevention of mass unemployment.

We make one broad observation regarding both of these. In order that we may secure as a nation the benefits expected from them, we must at the same time explore every means of increasing as much as possible in Canada the production of the good things of life. For our collective income, the livelihood of the Canadian people,\* is nothing but the joint product of our own efforts. Most of our products we consume ourselves. A substantial part of the total is exchanged, on terms of mutual advantage, for the products of other nations; but on balance, our income is limited by Canada's capacity to produce.

Unless we can produce the good things of life in abundance, proposals such as those above mentioned will involve merely the sharing of poverty.

### *Facing a Demoralized World*

3. It may be thought that if a determined effort is made within Canada to prevent the recurrence of mass unemployment, the production of the good things of life in abundance is then certain to follow. But in the chaotic conditions abroad, with which we shall be confronted immediately the war ends, there is a threat as well as a challenge.

On the world outside us we have depended, ever since the days of Champlain, for marketing on a satisfactory basis the exportable products which we could not ourselves consume in their entirety. Whenever we were unable to market such products abroad on a satisfactory basis, all of Canadian industry suffered and all business activity slackened; only when the demand abroad for our exportable products had revived, did Canada succeed in recovering prosperity.

Looking to the future, we do not know that we can continue to find adequate outlets abroad for our exportable products. To do so must be one of our first concerns.

We Canadians shall be seeking to prevent mass unemployment, in a world more exhausted and demoralized than it has been within a thousand years. We shall face a task of rebuilding—the re-creation of institutions and of trade channels, no less than of shattered towns and cities, of railroads and shipping—more difficult than any which faced our predecessors. We shall share that task with other nations, conscious that on the success or failure of this common undertaking our own welfare will directly depend.

In brief, we cannot now foresee the strains which the Canadian people must endure, not only during the remaining war years, but also following the war's end. But we know that they will suffer strains, near the limit of endurance.

From this it follows that much more now depends on the mental and the physical fitness of our people than in former years, when the foundations of our common civilization had not yet been dangerously weakened.

It also follows that the springs of initiative and enterprise on the part of individuals must at all cost be strengthened. We cannot throw back on that mysterious abstraction, the state, responsibilities which properly confront us as individuals. For the state is nothing but ourselves in a collective capacity; the state has no resources at its disposal but those with which we can ourselves provide it.

The responsibilities of the state—that is, the responsibilities that we must undertake collectively—will in any case be heavy. Not unless personal initiative is encouraged and allowed freely to function, can we hope so to limit the tasks of the state, as to make possible an efficient performance of them.

Mr. MORRELL, called.

Mr. MORRELL:

## II. SPHERES OF GOVERNMENT AND BUSINESS

### *Dividing the Field*

4. In the light of these broad principles, we now venture to place certain suggestions before your joint committees.

Our suggestions are concerned both with collective action, wherever we believe that to be desirable; and as well, with the part that individual enterprise in business must assume, if the common objectives of all Canadians are to be realized.

In making these suggestions (and with regard especially to collective action on certain problems) we have thought it well to disregard the constitutional questions that will arise out of them. For in a federal system it has always to be decided, when any collective action is proposed, within what sphere of competence such action falls.

With reference especially to Canada, these questions are further complicated by the likelihood that the British North America Act will, at least in some measure, be revised following the war's end. We cannot foretell what revisions will be made. In this presentation, therefore, while maintaining the broad distinction between collective or state enterprise and individual enterprise, we shall generally hereafter merely make reference to certain activities as properly belonging in our opinion to government. We shall use the word government in this connection, as a rule, without reference to the two questions: Whether in any given instance the dominion government or the provincial governments or the municipalities would be the proper source of action?—and (when a given form of collective enterprise involves the cooperation of governments with one another): By what means joint action on the part of the various governmental authorities should be brought about?

These issues are for others to decide; and our own task will be simplified, if we need not make reference to them.

### *Team-work to Attack Want*

5. Our approach to the question, what are the respective spheres of government and private enterprise, is on an entirely practical basis.

We note a remarkable agreement among the Canadian people, in desiring certain broad objectives. Statement of these objectives does not arouse controversy. Foremost, perhaps, among all their requirements is this: that want and the fear of want must be removed.

But when the means are discussed of attaining this objective, we find wide disagreement; some looking to government as the main agency by means of which to reach the desired end; while others would restrict the functions of government within relatively narrow limits.

We do not believe that this issue should be decided, as some seem inclined to decide it, on an abstract basis. There is no sweeping question of principle involved. Decision as to the respective spheres of government and private enterprise must, of course, ultimately take the form of compromise between the somewhat sweeping views of opposed partisans.

Our aim has been merely to discover what are the respective contributions which government and private enterprise must make, in order to secure the benefits of a given, agreed policy; in other words, the respective contributions, without which these benefits will be lost. Recognizing as we do, that there are few more important objectives than the prevention of mass unemployment, we propose briefly to discuss the relations of government and private enterprise in relation to this objective.

We believe that neither government alone, nor private enterprise alone can secure the desired results—that they can only be got as the result of joint and harmonious action by government and private enterprise together. But we do believe also that in the long run the main burden of securing them rests with

private enterprise; and for private enterprise, therefore, we bespeak a large restoration of freedom. Business enterprise, in planning for post-war employment, is severely handicapped in not being aware of those restrictions under which it may still be labouring when production for peace-time needs is due to begin.

### *Three Post-War Stages*

6. We visualize the problem of unemployment in three main phases:

#### *Reconversion*

(a) During the period of demobilization, when perhaps three-quarters of a million Canadians in our armed services are returning to civil life, and when perhaps an even larger number of munition workers, as well as young persons entering employment for the first time, may be looking for work in the production of goods for civilian needs, Canadian industry cannot of its own motion at once provide jobs in the requisite number; for the quite obvious reason that an extensive "retooling" is required, in the reconversion of plants at present on munitions production, back to peace-time production. During this period of retooling (which may be completed more quickly than some sections of the public appear to think) very large responsibilities for the welfare of Canadian workers must inevitably rest upon government.

In this connection we make four suggestions:

#### *Public Works*

(i) that government should now prepare, with a view to putting them in hand as soon as the process of demobilization begins, certain public works of a non-recurring character, which would provide interim employment for our people (these would include airports, the building of bridges and highways, elimination of grade crossings, and construction of hospitals and public buildings, schools and recreation facilities);

#### *Town Planning and Rehousing*

(ii) that government should take appropriate means (including such changes in methods of local taxation as may be necessary) to stimulate town planning by municipal authorities, and in co-operation with private enterprise, the rehousing of the people—as a result of which (as was done on an immense scale in England after 1932) large numbers of our people may hope to find and to remain in employment; and

#### *Long-term Plans for Conservation*

(iii) that government should also now prepare at the same time to launch certain projects for the conservation of our soil and of our waterpowers—the beginnings of an undertaking which, if our natural heritage is to be preserved, involves long-term planning and effort including scientific forest management on a large scale, and will provide a measure of employment in the public service continuously.

#### *Co-ordination of Transport Facilities*

(iv) that government should undertake without delay to co-ordinate all the means of transport in Canada; since only by co-ordinated use of water, railroad, road and air transport facilities can we secure the best possible distribution of goods, from coast to coast and abroad—and at the lowest possible cost; and that, in addition to the physical changes necessary for this purpose (such as the construction of through traffic highways, for example) such a revision of the British North America Act as is requisite for the purpose, should be brought about.

*Our Stake in World Markets*

(b) During the period of peace-making, if a world market is to be re-created for the exportable products of countries such as our own (and the prospect of preventing permanently the recurrence of mass unemployment in Canada must hinge in a very large measure on the success of this effort), bold and far-reaching international policies must be launched by the governments of the united nations acting in concert.

No country has a greater stake than this dominion, in the success of plans concerted to this end. For if a world market cannot thus be restored, we shall experience a dangerous disequilibrium in Canada. The prairie provinces in particular will find themselves impoverished; and a radical and costly re-organization of the whole of the Canadian economy, lasting over a long period of years, may be forced on us. Here, again, is a responsibility that obviously belongs to government; and on the success with which it is discharged, will depend in a large measure the success or failure of all our domestic economic policies.

*Heaviest Employment Task is Industrial*

(c) But in the long run (when once the retooling is completed, and provided that we can still dispose abroad of the exportable production yielded by farm and forest, fisheries and mines) the prevention of mass unemployment is in large measure a problem for industrialists.

In every depression that we have experienced, unemployment and the privation resulting from unemployment have been concentrated, and especially severely felt, in a limited range of occupations.

As between good times and bad times, those of our industries which produce goods for immediate consumption, do not as a rule experience very marked ups and downs.

It is industries which produce durable goods, and in particular, capital equipment, which experience the full force of hard times; iron and steel, the non-ferrous metal industries, the manufacture of trucks and automobiles; and perhaps most important of all, the building and construction industries.

Attempts by government to compensate for unemployment in this group of industries by means of public works are always costly; planning in advance is very difficult; and furthermore, experience both here and in the United States indicates that the resources at the disposal of government are insufficient for this purpose. (Even at the height of the new deal expenditures, for example, there were still millions of persons unemployed all over the United States.)

*How to Maintain Flow of Investment*

The root of the problem is that the savings of corporations and of the public, which normally pay for the production of durable goods and capital equipment, and result in the production of such goods in a steady flow, fail in times of depression so to be spent; and the damming-up of the stream of savings thus causes mass unemployment of a distressing character, in a concentrated sector of industry.

The resulting impoverishment of the workers laid off in this sector lessens the demand for consumer goods of all kinds, and thus adds to the general distress.

Solution of the problem of unemployment thus is only to be found in measures which will release the dammed-up stream of savings, and bring about expenditures on durable goods and on capital equipment, in a normal volume.

Here, surely, the role of government is indirect. Not artificial creation of work, not intrusion of government upon the field of private enterprise is required; but rather, measures which will if possible ensure that the normal stream of demands for durable goods and capital equipment shall be continued without interruption.

What does this involve? The results of much recent economic research, in a number of countries, point in the same direction; and we note a substantial agreement, among outstanding economists of several nations on the nature of the problem.

### *Responsible Role of Government*

It has already been suggested that "deficit expenditures" by government are not an effective substitute.

By "deficit expenditures" we mean the deliberate incurring of budgetary deficits by government, as a means of inflation or "reflation" during a time of depression—for example, the "pump-priming" expenditures of the Roosevelt administration, between 1933 and 1937.

For 1938, Canada's "national income on a produced basis"—before depreciation—is officially estimated at \$4,535 millions. The total of expenditure on capital goods may be guessed as about \$600 millions (including corporate depreciation and savings, \$290 millions; other investments at home, represented by the net growth of bond issues payable in Canada, \$182 millions; investments abroad, \$139 millions). This was about 13 per cent of the national production. Certainly 1938 was not a year of full employment; to secure this, an addition of \$800 millions or so to the national income might have been required; and this might have involved an extra \$400 millions of expenditure on capital goods. Thus, for full employment in 1938, we would have needed an expenditure on capital goods of, say, \$1,000 millions—or roughly 20 per cent of the resulting national production.

This figure is very much larger than is usually realised; that is no doubt why (when the required total is so large) direct attempts by governments to create employment, have in the past so frequently failed to stimulate trade. A limited "Public works" program might even do positive harm, if the circumstances of its announcement are such as to create alarm among private individuals or institutions, uncertain whether to make large capital expenditures or not.

for expenditure of the national savings on durable goods and capital equipment. Basically, the reason is that no government has ever in time of peace contemplated deficit expenditures on a scale corresponding to the national savings—which in sum, may be not less than one-fifth of the national income as a whole.

Government should instead devote its energies to the sustaining of private investment at, if possible, a constant rate. That is, it should be prepared, in a time of incipient trade boom (by procedures the reverse of those that we shall suggest as appropriate to head off depressions) actually to restrain somewhat the volume of private investment. More particularly, government should be prepared in a time of threatening depression, to secure that the community's rate of investment in concrete, capital goods shall, if possible, be maintained.

We do not propose to lay down in any detail a programme, designed to bring about this end. The means at the disposal of government lie partly within the field of monetary policy, partly within the field of budgetary technique.

With regard to the former of these, we make no recommendations. We believe that the present internal monetary controls are adequate to Canada's needs, and would not approve a modification of them. We state our conviction that those who have had charge of Canada's monetary policy during these tragically difficult years have rendered an admirable service to the country. Their plans have been sound in principle, and thoroughly co-ordinated as to procedure and timing. During the successive crises since 1940, the steps that they have progressively taken have made possible a colossal war effort by this country. They will face problems of a different order, when we reorganize for peace; but their efforts, we make no doubt, will then be devoted, with equal judgment and skill, to the maintenance of economic stability.

### *Budgetary Technique*

With reference to budgetary technique we do make two definite suggestions, of which the first is negative in character, the second positive:—

#### *Spending in Depressions*

(a) that retrenchment of the normal expenditures of government when a trade depression is threatened, is a move all too likely to make certain the

depression's arrival—there should be no such retrenchment but instead, the budget should then be permitted a temporary deficit on current account, to be liquidated when business recovery brings about a subsequent expansion of revenues; and

### *Taxation Incentives*

(b) that much can be done, when a trade depression is threatened, to stimulate expenditures on new capital equipment *at that time*, by permitting varying rates of depreciation on capital expenditures according to the periods when these are undertaken, and even allowing new capital expenditures to be charged in periods of industrial depression, as an offset against taxable income.

(In other words, government, instead of increasing the burden of taxation when a depression is threatened—as has generally been done heretofore—should lighten temporarily the burden of taxation, by making adjustments calculated to sustain business enterprise, at the same time maintaining undiminished its current rate of expenditure. Any direct loss to the revenues of government, which these procedures involve, would we have no doubt be more than offset, firstly, by the resultant quickening of the country's economy generally—which would sustain revenue from other taxes; and secondly, by the resultant saving in relief expenditures, because unemployment would thus be kept within manageable bounds.)

On the subject of taxation, in its other aspects, we make further suggestions at a later stage in this report.

### *Removal of Restrictions*

7. With such assistance from government, we believe that private enterprise will be capable of undertaking planned expansions of plant, equipment and organization, with a considerably longer range than heretofore; and that the beneficial results, in the form of more stable employment, will be very considerable.

In this connection, we believe that current wartime restrictions on the freedom of private enterprise, to produce and to dispose of its products, should be removed as soon after fighting ends as is practicable.

Quite obviously, priorities on certain raw materials must still be maintained in the first phase of the return to peace; the necessity for rebuilding wrecked housing, transportation facilities, and industrial equipment in a dozen countries, with the greatest possible speed, requires this. If everyone at once were given access to the raw material markets, a disastrous disturbance might cause inflation of raw material prices.

Nevertheless, our guiding principle should be progressively to remove wartime restrictions in general, as fast as these can be removed without endangering our equilibrium; and as well, to make an end of the delegation of powers to subordinate authorities—so that parliament shall resume its traditional control over administrative functions.

These restrictions (and this delegation of powers) have been accepted in wartime, both in the letter and in the spirit. They remain absolutely necessary, so long as all of us are animated by three common purposes—to produce promptly the maximum of war materials, to deliver them on the fighting fronts, and to make possible the most effective use of them in battle.

But these wartime restrictions have performed a double function. They have been imposed, firstly, to stimulate our war effort to the maximum; and secondly (because the war effort itself involves the diversion of resources on a large scale, from the satisfaction of civilian to the satisfaction of military needs), they have been imposed *with a view to making impossible the satisfaction of many civilian wants*, which must be held in abeyance as long as the fighting lasts.

As soon as fighting ends, the satisfaction of such civilian needs will again become a legitimate object of enterprise; moreover, the possibilities of quickly finding continuous employment, for between one and two millions of demobilized veterans and munition workers, will in a large measure depend on the removal of these restrictions—that is, on the freedom with which production to meet civilian demands of all kinds can at once be resumed.

When it is borne in mind that government cannot of itself, by means of deficit financing, do more than to tide over our economy during an immediate interim of retooling, the magnitude of the task of private enterprise, in providing reemployment for this great multitude of men and women, at once becomes apparent. Obstacles to the performance of this task should of course, therefore, be removed; for their continuance would imperil the whole of our hopes for reconstruction.

The CHAIRMAN: Do any members wish to ask questions in connection with that part of the material which has already been read? If they do we will have a little time for that. If not we will go on.

Mr. MACNICOL: The first item that I see that invites a question is in Subsection No. 6 of Section No. 11. As far as Subsections 4 and 5 are concerned I am satisfied that the committee and everybody else will see to it that the constitutional question will not disturb rehabilitation and that team work will be the order of the day. In Subsection No. 6 in connection with retooling it is stated that there are 750,000 Canadians to be returned from overseas, not altogether from overseas but from the armed forces in Canada as well, and approximately another million Canadians are engaged in this work and these are to be provided for. There will be an interim, it is stated, for extensive retooling before the rehabilitation of plants at present on munitions production. What I am wondering is if the Chamber of Commerce have only considered the retooling of plants that have been in operation for many years or have they also considered what is to be done with the vast single purpose plant, plants that are manufacturing but one line of product, shells or otherwise, which would need to be retooled from beginning to end? Take in a single purpose shell plant using single purpose lathes; all those lathes after war will go into the scrap heap. They cannot be used for anything else. Most of those large plants would have to be retooled. I was in big business myself for many years, and I can see how the old plants, the ordinary big industries, can be retooled but how are these vast new war plants going to be retooled?

Mr. HUGGETT: Mr. Chairman, I am afraid that is a question which at the moment I cannot answer. I appreciate all that has just been recently said, but speaking from experience with the company with which I am connected, Canadian Industries, which as you probably know also directs and controls the wartime subsidiary, Defence Industries, as far as we can see at the present time quite a number of these plants are really useless for conversion to other types of manufacture, particularly shells, which you mentioned, small arms ammunition, cordite, T.N.T. I can offer no suggestion at this time. We have the matter very much in mind but at this stage I am afraid I have nothing to suggest with regard to what use the majority of these plants can be put.

Mr. MACNICOL: That is very important, Mr. Chairman, and something that we should keep in mind. For instance, take airplane plants that now employ so many thousands of men. They will be washed right out as far as being of any other service is concerned. They might be developed to make other lines of materials but that would take quite a long while. Take a plant like de Havilland that presently employs 4,500 men making planes; every one knows that within a week after the war those 4,500 men are out, so that what Mr. McFarlane said is in my judgment something very important. We must

keep before us the necessity that falls on somebody of using as many of these vast single purpose plants as we can after the war.

Senator LAMBERT: In connection with that I would like to point out that there seems to be difficulty at the present time in getting definite information or data from the manufacturing industries in this country pointing to a possible back-log of consumer demand for goods when this war is over. I understand that there is a committee at work now attempting to give an estimate on that. In all this vague picture of replacing the activities of the airplane factories with more substantial or economical forms of production after the war is over one must have some sort of estimate of what the possibility for consumer goods demand in this country will be. It will be a difficult thing to get an accurate estimate, of course, but I think that a conservatively approximate estimate would be possible. That leads one again to the question as to how far private enterprise in this country is willing to co-operate amongst its own individual members sufficiently and adequately to meet the challenge that will certainly be facing private initiative after this war is over, of the responsibilities that should be faced by private enterprise and private initiative. It is very easy to say that the government responsibility is so and so and the role the government must play is to be so and so. My own experience in delving into this thing a little bit is that there is a great deal to be desired in the form of co-operation amongst the manufacturers themselves in this country towards getting the ground prepared for a decent estimate of the problem.

I had a note here with reference to something on page 9, "Taxation Incentives, that much can be done, when a trade depression is threatened, to stimulate expenditures on new capital equipment", etc. That follows very closely the thought that was expressed in the very able report that has been issued by Lever Bros. I think that the thought that is expressed there is a most desirable and admirable thought. On page 10 it goes on to suggest that private initiative should be given every opportunity with the assistance of the government to revive activities after the war, and that one of the essentials in that direction is the removal of controls and priorities, and so on.

Mr. MARTIN: Or knowing how long the controls should exist.

Senator LAMBERT: I should like to get more light on this. I think there is a good deal of wisdom, of hindsight versus foresight in this suggestion that was contained also in the Lever Bros. report about being able to foresee depressions and booms, but in wartime with the machinery and the field we have to operate in now established by the Department of Finance, the machinery that has been built up around it in the form of price controls and priorities surely has a very direct bearing on the ability of the government to keep close contact on economic conditions within its field and therefore foresee or sense the time to impose regulation. Is it fair to assume that with a complete relaxation of all these controls and priorities that a budgetary policy will be in the same position to sense the time to regulate the same way that it does now with the existence of that machinery? I do not know whether I have made my point clear. Possibly Mr. McFarlane or Mr. Jackson would care to elaborate that. I think it is a very important point though in the line of demarcation between government functions and those of private enterprise after the war.

Mr. MACNICOL: Mr. Chairman, the point I had in mind that Senator Lambert has not touched is the fact that when this war ends a large number of government plants, not private enterprise plants at all, will be automatically closed and it will be up to the government more than private enterprise to provide for its own employees, either by not immediately discharging a vast number of men from the army or providing them with work. I have great confidence in private enterprise doing its part but the government will have

to seriously consider what it is going to do to keep thousands of men in its own plants employed. There are perhaps nearly 100,000 men now engaged. We cannot expect to turn this number over to private enterprise immediately. All these plants are single purpose plants.

SENATOR KING: That is a field for co-operation between industry and the government. These men have got to go back into the plants that go on consumer goods, and that transition will have to take place as time progresses but there should be surely some plan worked out whereby that transformation will take place. It is true these plants will close down.

SENATOR LAMBERT: I think the point that Mr. MacNicol raised is a very important one. The government does control a vast industrial capacity at the present time, and the problem of what will happen to that after the war is equally important in the matter of employment as that of private industry, but the point is, I am sure you would agree, you would like to see private enterprise and private initiative assume responsibility for that capacity so far as it is possible. The question is, how are you going to do it? Is the government going to be asked to assume the role of a prophet and tell everybody when there is going to be a depression and when there is going to be a boom? Where is the connecting link?

Mr. MACNICOL: I think it is in the next paragraph under public works.

Mr. BERTRAND: Before we leave this point, and following the remarks made by Mr. MacNicol I think that it would be well to ask if the Chamber of Commerce have not only considered the point of view you brought forward but the point of view of the possible competition in manufacturing we are going to have from other countries where industries at the present time are built up with state capital or governmental capital. Take in the United States; at the present time they are investing billions of dollars in industries that are just being put up to produce war materials. Undoubtedly there will be a problem, and not only a problem for the United States but it will have repercussions on the trading world after this war. I think it will be probably helpful if the Chamber of Commerce would state just exactly what would happen if other countries—not mentioning specifically the United States—after the war decided to write off their capital investment and said they were going to produce in competition with the rest of the world. How would this affect our own situation?

Mr. JELLETT: It is an extraordinarily difficult question. I will try and deal with it in sections. I think the first question that was implied anyway, if not directly asked, was as to the time at which the government would change the system of taxation so that it would encourage efforts that would prevent depressions, and when to do otherwise. That is a very extraordinary power and difficult to use, but I think we would contemplate it would have to be used on the basis of some statistical figures showing how the business of the country is going. There are certain indices got out by the Bureau of Statistics which would give an indication when it became necessary to make some of these changes. Perhaps that was not the first point but that was a point that was raised.

On the question of the conversion of plants, Crown companies or government controlled and government built plants, that is very difficult because with all the good will in the world of the Chamber of Commerce and manufacturers and business and free enterprise it is perfectly obvious that all these people only have at their disposal a certain amount of capital, resources, and so on, and they cannot make promises indefinitely as to how great the work they can do. They do say that employment has always been largely provided by industry and that the best chance of doing this sort of thing is through private industry as the biggest employer. For instance, government plants

have often been built in the midst of a plant of a company. It does not matter what company you take. Take Dominion Engineering in Montreal. There was a great new plant built right in the middle of that plant and it will have to be disposed of. We would not like to contemplate that this plant would be operated by the government when converted to ordinary industrial uses. We would not like to think that the government was going to use some plant to manufacture sewing machines or refrigerators. We would like to see all this development come naturally through increased enterprise. I do think this is possible, that the abandonment of certain buildings and plants from their present use, namely munitions, may be gradual. We may find as the war goes on we have an over-supply of one type of munitions. We may want planes and ships and we may not want certain calibre guns, and possibly the question of having to take care of these people will come upon us gradually and industry will have an opportunity of **taking over these people a few thousand at a time** rather than a great mass of them at **one fixed time** in the future. If they have that opportunity to render employment I think their chance of doing it must necessarily be based on their ability at that time to get the release of certain raw materials necessary for manufacturing, so that the whole question ties into these controls that we have spoken about. That may be a vague answer, sir.

Mr. BENCE: I wonder if private enterprise recognizes the great responsibility which is upon their shoulders in this respect and whether they recognize the fact that the onus, generally speaking, and the proper discharge of that onus, depends upon, we will say, the retention of private enterprise in the life of this country or its complete disappearance. I mention this because of the fact that there is a body of opinion in this country—how large it is I do not know—which is in favour of complete national ownership of most of the big industries. Now, private enterprise, in my judgment, cannot accept those industries and those enterprises which are bound to produce profits or certain profits, but they will have to take the good with the bad, and they cannot turn to the government of the country and say that in those spheres, because the risk is too great or because the return is not sufficient, you have to absorb that particular end, whereas, on the other hand, we will take all of that part of private enterprise which is fairly easy and in which the risk is not great. I mention this because of the fact that it seems to me a private enterprise should be given and will be given its opportunity after this war to demonstrate what it can do, but if it does not accept its full responsibility in that respect then we are going to turn to some other system.

Mrs. NIELSEN: At the top of page 10 the brief states:—

In this connection, we believe that current wartime restrictions on the freedom of private enterprise, to produce and to dispose of its products, should be removed as soon after fighting ends as is practicable.

When Dr. James was before the Senate reconstruction committee he mentioned at that time, according to the reports, that in his opinion the excess profits tax is one of those things which should be immediately removed with the cessation of hostilities to give freedom to private enterprise. I wonder if some of the gentlemen here would elaborate a little upon this small paragraph and state a little more specifically what is meant by the term "current war-time restrictions"?

Mr. McFARLANE: With reference to administration, that is dealt with in section 12, and if you will wait until we get there you will see that it has reference to the whole question of taxation. The controls of economy which also control finance are dealt with in the same paragraph we are discussing now, and we believe that policies that have been sound in principle and successful in war begin, with the same expertness, in times, we will say, of change to

lessen the impact from war to peace and will be manipulated or directed through, perhaps, the Bank of Canada which again is part of the Department of Finance. I do not think there is any specific answer to Mrs. Nielsen's question as to what is the proper point or when the date will be for removing wartime controls; there will be a smoothing of the impact rather than allowing the change to come as a shock. It may be rather indefinite. It is something we are looking ahead into, and we can only look for smoothness in going through the transfer of the control of our economy—it is practically all controlled now—to a lessening of those restrictions as the civilian organization can take them up and proceed to sounder and more prosperous economy in times of peace.

Mr. MARTIN: Coming to your third paragraph on the persistence of controls after the war, your statement is very general. I suggest that your statement is so general as not to clearly indicate what you really have in mind, because a reading of the material of those who have given much thought to this subject would indicate that there is bound to be a considerable extent of maintenance of the present control. Sir William Beveridge, who was here the other day, in speaking of his plan from the cradle to the grave, presuming that we will have a policy along the same line, postulated his whole principle upon the assumption that it will be necessary to maintain a stabilization of the whole price structure at the end of the war. I think he did say that that did not include wages, although he did not clearly indicate how you could remove wages from the cost of production. Nevertheless, from his statement there will have to be a stabilization of the whole price structure in a scheme of that character if it is to succeed and that would mean the continuance, undoubtedly, of the very important phase of the wartime control system. What would be your attitude in that regard?

Mr. McFARLANE: I still contend that there would have to be a smoothing process rather than a complete shock, or a complete removal. Now, with regard to your illustration containing Sir William Beveridge's point where you have a restriction on the prices of goods purchased but not on wages, that will not work, the two must work out in a free enterprise; and we illustrate that here by seeking to suggest that the question of materials be restricted until a common free enterprise economy exists. Removing the question of restriction on raw materials but allowing for free and open markets suddenly would jeopardize the whole structure—remove prices as we put on certain prices at certain times—a limitation of prices or a restriction. Let us take them off in certain spots as soon as they can be removed and as we settle down. We are dealing entirely with the future.

Mr. BENCE: What is the attitude of private initiative going to be with reference to the suggestions made on page 9, subparagraph (a) with reference to spending in depressions? It is suggested that that is the time when the government should have a temporary budget deficit for the purpose of assisting in bringing back a period of prosperity. What does private enterprise suggest it is going to do to bring us out of a depression during a time like that?

Mr. McFARLANE: It is there on page 9.

Mr. BENCE: All that is suggested there is that during that time the government should refrain particularly from putting on additional taxation. For example, if there are people unemployed and money has to be raised in that respect the suggestion is that instead of taxing private enterprise the government should have a temporary budgetary deficit, and as many restrictions as possible should be removed from private enterprise; but is private enterprise, on its own account, going to assume a definite responsibility at that time? For example, I have this in mind that during the last depression, as soon as it was evident that the depression was coming on, private enterprise removed part of its capital rather than as it should have done, I think, taken advantage of that situation to

expend more of its capital in order to retain the flow of purchasing power. I am wondering what private enterprise's attitude would be if there were a recurrence of that situation?

Mr. JACKSON: If I might make a suggestion as to where private enterprise fails in time of depression—I think this is common ground between the member who asked the question and the chamber of commerce—it is in expenditures or extensions of equipment. That was the big failure in the 1930's and that is the big failure in almost all the depressions that have occurred. The point is sound that retrenchments of such expenditures by private enterprise in the 30's did increase the amount of unemployment at that time. If that is so, the objective is to keep private enterprise spending on capital equipment at an even rate; that it is to its own interest to do so. The suggestion—this is a boiling down of the proposal—is that it should be made somewhat easier by taxation policies for private enterprise to do whatever is necessary in a time of depression in order to forestall at the beginning of the depression and see that it does not come about at all. I do not think it is a case of private enterprise formally assuming a moral obligation to do what it naturally should wish to do anyway but of government taking certain steps to make it a little easier for private enterprise to do it.

Mr. MACNICOL: Before we leave Section No. II, I may say that I believe the committee is in agreement with certain suggestions made by the chamber of commerce in its brief. There is reference in subsection (i) of subsection 6 of No. II to public works, "that the government should now prepare, with a view to putting them in hand as soon as the process of demobilization begins, certain public works of a non-recurring character, which would provide interim employment for our people...." There is the construction of certain public works which we have been considering in this committee for some time. There is mention of airports, and we are all in agreement that after the war we will have to have more fast air transport for Canada which will result in the construction of airports. Then there are bridges. I should say that hundreds of bridges, now constructed of wood, will have to be rebuilt. Then there are the highways. There is ample room for more highways in connecting up different districts.

The CHAIRMAN: Hear, hear.

Mr. MACNICOL: Then there is the matter of the elimination of grade crossings. We all believe in that. That will provide employment. Then there is the matter of supplying hospitals for the outlying parts of the country, districts such as that from which Mrs. Neilsen comes. Areas of that kind should be provided with hospital facilities. People in those areas have to go many miles, as Mrs. Neilsen knows—anywhere from five miles to fifty miles—to get to a hospital or even to receive medical care. Then there is the matter of recreation facilities. Everybody agrees there is work to be done there. There is the matter of conservation of the soil; we all agree on that point. There is also the matter of the conservation of our water powers, and we all agree with that. In subsection No. IV there is reference to coordinating our water, railroad and air transport, and that is a large field. The committee has discussed a number of those points. Then there is subsection (b); I am sure a lot of members of the committee are quite in agreement that there should be more industrialization in the western provinces, particularly as regards their own natural products. We had an interesting session yesterday when we dealt with the processing of wheat in the west to make the base of rubber. That would require plant in the west and we are convinced that there should be further industrialization in the west.

I have not any doubt that the third paragraph of subsection (c) on page 7 will result in something because as soon as the war is over all the clothing manufacturers and the companies manufacturing cloth will increase their plants at once so as to make better clothes than we are now able to buy. Then there is subsection No. 7 on page 9. I have not any doubt but there will be a lot of

plants which made consumer goods before the war where additions will have to be made to take care of the increased purchasing power because of the increase in population.

Hon. Mr. ROBERTSON: On the general question "responsible role of government" on page 8, though the controls may be relaxed as compared with the present wartime economy, do they not contemplate that there will be a larger degree of governmental control than existed in the pre-war period?

Mr. McFARLANE: I think that is inevitable.

Mr. JELLETT: Before we close that paragraph I should like to say a word concerning Mr. Bence's suggestion about what private enterprise should undertake. I think we should have in mind that private enterprise is not like a single corporation that can vote money or say that it will do this or that; it is a vast system in which almost everyone so far in the country has been involved.

Mr. MARTIN: Perhaps that is why it is wrong to call it private enterprise.

Mr. JELLETT: It is difficult to say. If you ask: Will private enterprise take over a losing business as well as a gaining one, there is no one to speak.

Mr. BENCE: I am not suggesting that you take it over but that you continue with the losing business rather than drop it and expect the government to take it over.

Mr. JELLETT: Well, they don't want government really to be in private business at all, and their view of it is that the government should not be in private business, that private business is quite capable of looking after itself. Of course, we are going to have thousands and thousands who are to be taken care of when they come out of the army, and out of these war factories; and I am inclined to think that private business will do the very best it can to assist in this general question of re-employment. I would not go so far as to suggest even that the whole impact of this thing can be taken up adequately by private enterprise; nor, would I suggest that private enterprise could or should tell the government how things are to be done. All we can do is to make recommendations and give you the benefit of our thoughts and our ideas; as on occasion we have done in the past.

Mr. BENCE: It strikes me that it would need the development of a spirit in private enterprise so that when a depression approaches each individual unit of business in private enterprise would not immediately run for cover and leave the whole question of administrative control to someone else.

Mr. JELLETT: Don't you think that is the very excuse for the existence of organizations like our Chamber of Commerce and boards of trade?

Hon. Mr. LAMBERT: That is it.

Mr. JELLETT: The whole contents of this brief shows that that is the thing we are trying to do; we in business take that view.

Hon. Mr. LAMBERT: Just one point raised by Senator Robertson, I think it should be made quite clear that the very definite recommendation here for the removal of wartime restrictions should be qualified by the thought that you are going to have to meet new conditions; or, at least, I think the recommendation might be prefaced by recognizing that you are going to have more control rather than less control, that is what I want to bring out. For instance, it says here on page 10:

But these wartime restrictions have performed a double function. They have been imposed, firstly, to stimulate our war effort to the maximum; and secondly (because the war effort itself involves the diversion of resources on a large scale, from the satisfaction of civilian to the satisfaction of military needs), they have been imposed with a view to making impossible the satisfaction of many civilian wants, which must be held in abeyance as long as the fighting lasts.

In other words, to enable the government to exercise that so as to meet the extension of capital equipment. You must have controls, and you must have machinery to enable it to function effectively.

Mr. McFARLANE: I was trying to explain to Mr. Martin that it is a smoothing operation rather than an abrupt operation under your government; and I think there will be more, inevitably, because of economy and business progress—I think the result will be that you will see various sections of these controls continued.

Hon. Mr. LAMBERT: Personally I would like to see the controls evaporate, but I cannot see any way of doing it.

The CHAIRMAN: It will not end quickly.

Mr. MARTIN: We have not as yet mentioned anything about controls in international economy, and as I see it some measure of control ought to be exercised or taken into account in the development of international processes as well.

The CHAIRMAN: May I just make one suggestion, following what Senator Lambert has said: it seems to me if the government is going to be responsible in the future—I do not mean in the immediate post war period, but in the future—for so regulating affairs that it may step in in order to avoid something that should not be permitted, then there must be something in the nature of administrative control, perhaps in abeyance, but ready to be applied when the need for its application becomes apparent. I am just pointing that out as a suggestion, and I think that is what Senator Lambert has in mind.

Hon. Mr. LAMBERT: And I think we should add that in any estimate we attempt to make as to the future we must recognize the importance of the human element, the individuals who help to compose the government of that day; and, like all such points, they will be disputed by others on the opposite side of parliament at any rate.

Mr. McFARLANE: Might I clear the atmosphere perhaps by changing a word; and also make mention of my own business?

The CHAIRMAN: Surely.

Mr. McFARLANE: Regulation is the word, in short; and that is a measure which can be applied to a large extent by business itself, and where necessary made effective through government *action*. As we see it this whole subject divides itself into three fields; first, there is the field of individual concern—and in that field let me say that in any case where a business is found to be non-profitable it perhaps should not exist; in actual practice as the losses appear and grow it inevitably expires. And then, where business is of a general character and nature, let us have it regulated for the benefit of the community, the whole of Canada. Where it is private enterprise it is naturally the concern of the individual, and he swims or sinks on his own initiative. He depends for his success on his ability to do a job, sell a commodity or render a service; and there will need to be some regulation there but not so much control.

Mr. MacNICOL: Would you kindly give us the nature of the businesses you have in mind in that connection?

Mr. McFARLANE: Oh, I have in mind such things as communication services, transportation services—the broad field of common use by the public at large.

Hon. Mr. LAMBERT: You mean utilities?

Mr. McFARLANE: Yes—where standards exist and necessarily have to be met; such as health standards, food standards and things of that sort—buildings, hygiene, construction requirements, safety devices and so on.

The CHAIRMAN: And now, Mr. Gillis, I think you had something you wanted to take up.

Mr. GILLIS: Mr. Chairman, I think Mr. MacNicol raised a question that this is one of the basic problems that this committee will have to handle and have some immediate program. Mr. MacNicol raised the question of a conversion of the crown emanations engaged in the production of munitions and war supplies.

The primary function of this reconstruction committee is to plan for the post war period with respect to employment for men in the armed forces and the thousands of workers employed in the manufacture of munitions of war; and we can see very plainly that if the war terminated within six months or the next year, as far as we are concerned now we have no program that would create employment or anything; and when Mr. MacNicol posed the question as to what private enterprise were prepared to do in the field of employment there was no answer given, in my opinion, that would mean very much to this committee. The Chairman, Mr. Jellet, stated as far as the crown emanations engaged in the production of war materials were concerned—and he cited as an example the engineering works at Montreal—if we are to have the true picture exactly as it is, if the war terminated to-night, you would have the army coming back, perhaps thousands of them, and you will have all these plants stopping, according to the program of the Chamber of Commerce, and there are thousands of workers being turned out into the streets. That is not a healthy situation, and those workers in the war industries and the boys and the girls coming back from service are not going to stand by with their hands folded waiting while we make up our minds as to what system we are going to use to take care of them. They are not fighting for that kind of a world; and I think we will have to do something definite and concrete with respect to the utilization of these plants and the people employed in them to see what we can do for them in the way of creating employment, and also for the members of the services as well as the war workers when the war terminates; otherwise they are going to take it perhaps into their own hands; and I am a little disturbed by the debate that is growing up—private enterprise versus government employment. We have had seventy-five years of so-called private enterprise. It has been so private that a large majority of the working people of this country do not even get an invitation into the field of employment, we were not allowed into the circle of the gods; and that has been true of conditions over the past seventy-five years.

I would say the issue to-day is as to whether we should have a continuation of what we had for the last seventy-five years or whether we are going to make some changes. I suggest to you that the answer to-day is that the economy in the field of exploiting the resources of the people on the basis of profit alone has failed. That is what this war is about. It has completely broken down, this system of the exploitation of the resources of the world on the basis of all the profits for a few and poverty for the many. To-day we are fighting a war against that very thing; but we have to start thinking in terms of peace, and service to the country and the utilization of our resources to that end; and if we continue to just debate as to whether we are going to have more government control—government control in my opinion is only organization of the people themselves—the bringing in of new means that would guarantee the greatest measure of the things of life to the people themselves. And I think instead of relaxing the controls these controls are here to stay, they are planning boards. I think we will have to have a more equal representation of the people across the country on these boards; and I think that the thing now, the best contributions of the manufacturers' association or anyone in this country that is concerned with the future of Canada can make would be to make a study specifically of the question of absorbing the workers employed in war industries to-day, and making full use of these plants and factories so as to get them rooted into our economy immediately on the cessation of hostilities; and to see to it that these boys and girls who are now employed in the manufacture of war materials are guaranteed a job; and not only that, but also to see that

these plants and factories are available to the boys coming back from overseas to give them work and turn their wheels in the direction of rebuilding Canada and to give them a greater measure of security.

I do not care if you call it socialism or co-operativism or anything you like; but definitely we have to make use of the resources we have in this country and guarantee to our people some measure of security for the future. If we don't do it through the system of parliamentary government then someone else is going to do it in some other way. And, as Mr. Martin has pointed out, we have to realize we are living in a world where the trend is towards social changes. Russia will be a definite factor in the picture when this is over; Australia, New Zealand, and even England—

Mr. MacNICOL: And the continent of Europe.

Mr. GILLIS: Yes, the whole continent of Europe, and to some extent perhaps the United States; and we will have to be thinking along these lines. I think the first and most important thing for this committee to decide in relation to the future of Canada is to have a program for the effective utilization of these crown emanations in the field of production so that we can turn them back to the boys and girls in the services and employ them in the field of producing essential materials. If we do not plan like that someone else is going to come along and plan the thing for us. I am not forgetting that there are other things that need consideration; for instance, there is the question of taxation, and monetary reform and a lot of other things, but they are more for consideration in the future; I think that the problem of using the machinery and the materials we now have is the one we have to tackle, and tackle first, and guarantee that we are not going to throw people on the street now; that is to say, doing the best job possible; otherwise we are going to regret it.

We are living in a fast moving world and as far as private enterprise is concerned, I haven't any quarrel with it, but personally I know that it has failed; all that it has done in the past is to give a concentration of the nation's wealth in fewer and fewer hands. We do not want to go back to 1929 and 1930 when we had millions of people on relief in this country. That particular phase of economy in this country has been tried; and when anyone insists on that system still continuing to function as it was, and that we should return in the post-war days to things as they were before, where things just went from bad to worse and the whole mess was left on the lap of the government; I think such people are merely dodging their responsibility, they are not living in a realistic world, they haven't got the picture realistically. That is not the kind of world we want for the future.

Now, Mr. Chairman, I want to say that the brief we have before us is very well prepared. We are getting reams and reams of this kind of stuff and it is all just words, there are no concrete suggestions as to what this committee should recommend as the considered opinion of the Chamber of Commerce or of the Manufacturers' Association or other organizations of that kind, to meet a situation in which we are actually living, and to meet the situation were the war to terminate to-morrow.

Mr. JELLETT: I think there is an answer to that; at least, a partial answer—of course, a complete answer would open the way for a prolonged debate. Some of the statements made by Mr. Gillis would take a lot of time to deal with adequately. I do not think it is quite fair to say that the system has had the result of getting wealth into fewer and fewer hands. I think statistics prove that the number of shareholders, and particularly the number of small shareholders, has been spreading steadily, and that that process is one which has been going on over a long period of time. It is not fair to say that more and more money centres in the hands of fewer and fewer people; it is quite the reverse. The growth of the number of shareholders in private enterprises is proof of that.

Then, that we are seized of the importance of this thing I think is amply demonstrated by the fact that we in the Chamber of Commerce have been forming committees of citizens—your boards of trade—throughout Canada to do these very things that you and I agree should be done. We are doing just the same thing as the C.E.D. are doing over in the United States; they are circularizing employers and prospective employers of labour over there asking them what the present state of their enterprise is, how many people they have at present in their employ, what they plan to do with respect to future operations and how many people they contemplate they will be able to employ, and things of that kind; and all this has one object, trying to ascertain what the prospective employment opportunity in the immediate post-war field will be. And in my opinion, that is having a very direct result in stimulating the interest of private enterprise along the lines in which we are interested. I would not like to think that we are not conscious of our responsibility and trying to do something by way of organizing private enterprise and potential employers for the purpose of the re-employment of people now on active service when the war ends.

Mr. QUELCH: Referring to your brief, page 6, at paragraph (b) you say:

During the period of peace-making, if a world market is to be recreated for the exportable products of countries such as our own (and the prospect of preventing permanently the recurrence of mass unemployment in Canada must hinge in a very large measure on the success of this effort), bold and far-reaching international policies must be launched by the government of the united nations acting in concert.

No country has a greater stake than this dominion, in the success of plans concerted to this end. For if a world market cannot thus be restored, we shall experience a dangerous disequilibrium in Canada. The prairie provinces in particular will find themselves impoverished; and a radical and costly reorganization of the whole of the Canadian economy, lasting over a long period of years, may be forced on us. Here, again, is a responsibility that obviously belongs to government; and on the success with which it is discharged, will depend in a large measure the success or failure of all our domestic economic policies.

Now, I was wondering if I might ask the President of the Chamber of Commerce, is it contemplated that after the war Canada along with certain other countries will need to maintain a large favourable balance of trade? The reason I ask that is because of the fact that I think it is generally recognized and we are going to have to realize more and more that our export markets will depend on our capacity to exchange goods with other countries. How does he expect to develop or maintain an adequate volume of export trade unless we are able to maintain a compensating balance by imports from other countries; in other words, how are we going to be able to maintain full production unless we have an adequate balance of trade with other countries on which to base it.

Mr. McFARLANE: Your question, Mr. Quelch, is answered by item (b) at the bottom of page 25 which deals with trade balances.

The CHAIRMAN: Yes. Do you want to deal with that now or would you be content to wait until that part of the brief is reached, Mr. Quelch?

Mr. QUELCH: I think we should follow that up. Would you prefer to deal with it when that point in your brief is reached, Mr. McFarlane?

Mr. McFARLANE: That might be better.

Mr. MATTHEWS: Mr. Chairman, I was going to suggest that I think perhaps we are anticipating a little too much what is contained in the submission. I think we all came here to hear the submission of the Chamber of Commerce;

and I notice that there are 34 pages, and we have as yet only reached page 11, and the clock is still moving. I think you better go ahead and hear the submission.

The CHAIRMAN: There is something to that. I am of the opinion that the presentation of the Chamber of Commerce will not be finished to-day and that we will have to have a second meeting with them. I hope so. Now, Mr. Quelch, do you prefer to wait until that point in the brief is reached?

Mr. QUELCH: That will be quite satisfactory to me.

Mr. MacNICOL: If we are going to have the whole of their submission on the record we will have to give them a little more time.

The CHAIRMAN: Yes, we will have to have them here another day.

Mr. ADAMSON: Before we leave Mr. Gillis' point, if I might make a suggestion, I think this whole question boils down to what medium will be used by industry or otherwise to provide employment after the war. You will perhaps recall that after the Napoleonic wars it was the building of railways that really saved the industrial world; after the Great War it was probably the tremendous boom in automotive transport and automobile production all over the world. Now, I think what we are trying to do here is really to find the medium of production or activity that will provide employment after this war is over. I think that is the point that we are striving to bring out.

Mr. McFARLANE: Yes, I agree with you there.

Mr. MARTIN: The issue by Mr. Gillis is one of the utmost importance to this committee. As to the brief we have before us to-day, I think it is very well prepared. I think many of the submissions we have had have been very well done. But what is disturbing my mind, and what I think is disturbing the minds of most of the members of the committee is that if the war were to stop to-morrow all these excellent theoretical submissions—which perhaps are the right kind of approach to the solution of the problems of the kind involved—nevertheless, we have got to be prepared to deal when the war stops with the situation as it then is; we have got to have machinery and a program to provide the public—whether by way of an insurance scheme or through the efforts of industry—we have to have a scheme which will afford some way of making sure that the people who are now engaged in remunerative employment, and as well those boys and girls who are now overseas, will have something to which to turn when they come back. We have got to do something. The war may end in a year or it may end sooner than that, or it may not end for two or three years; but when the time does come we can not meet the situation with mere theory, we will have to have a scheme for putting men and women to work. That, I think, is the first problem.

Mr. ADAMSON: That is it; and that is a matter of concern to me because I have one of these crown emanations operating in my own riding which employs 7,000 men, and immediately the war is over those 7,000 people will be out on the street. What are we going to do with these people? We cannot put them to work in a company which is being closed out, but we have got to find employment of some kind for them. What is going to be the employment factor in industry after this war; is it going to be aircraft, housing—what is it going to be? That is the question, but I think it is one which it is not practical to answer just yet.

Mr. McFARLANE: If it is your suggestion, Mr. Chairman, that this meeting be continued to another session I think it will be possible for us to bring some material before you which would be of direct interest. We have under way a survey of what industry is doing in the way of anticipating employment possibilities and opportunities immediately after the cessation of hostilities. As Mr. Gillis says, and as Mr. Martin and Mr. Adamson have pointed out, it is important to know what business can do; and I think you will be

interested in knowing something about what business is doing. We know from their published statements that certain plants and businesses are planning—and a good many businesses are planning—to determine how many men they are going to be able to put to work immediately after fighting ceases; and how they are going to be put to work. I know hundreds of firms in Canada who are doing that and if it would be of interest to you we could make a short survey and when we come back on a subsequent occasion we could place before you the benefits of that survey. For instance, we could let Mr. Gillis know how many miners they would be able to put to work, and things of that kind as they relate to industry in all parts of the country.

Mr. GILLIS: That is it, that is what we want.

The CHAIRMAN: Would it be agreeable to the members of the committee to let further questions rest for the moment and have Mr. Morrell and Mr. McFarlane proceed with the brief; or, do you wish further questions?

Some hon. MEMBERS: Proceed.

The CHAIRMAN: All right, Mr. Morrell.

Mr. MORRELL:

### III. CO-OPERATION OF WORKERS AND MANAGEMENT

#### *Labour's Share of Production*

8. Labour has an interest no less direct than that of management, in making as large as possible the production of the good things of life. For in the last analysis, wages are paid out of the sale of the product; there is no source of wage payment but this.

The larger the volume of production, therefore, the greater is likely to be the remuneration of labour.

It is a matter of common observation, both in the United States and Canada, that the proportion of the gross income of industry which is paid to labour has varied relatively little for a long time past. Nevertheless, because the national income (that is, the total of our wealth production) has varied a great deal, labour's actual remuneration as between good years and bad has fluctuated widely.

Thus, in a comparison between the Canadian manufacturing operative's actual positions in 1929 and 1932, the following appears: strange to relate, the percentage of the gross income of industry that was paid to him was larger in 1932 than in 1929; nevertheless, since production had been sharply curtailed after 1929, and unemployment was therefore widespread in 1932, the material standard of living of the Canadian manufacturing operative had been reduced by more than 30 per cent during this period. It is to be hoped that never again will there be so drastic a fall in his income.

The desire of the worker for a better standard of living thus involves a vital interest on his part (whether he realizes it or not) in securing as large a volume of production as possible. On the side of management it should be recognized also, that unless the relations between the two parties are such that labour spontaneously co-operates with management, there is very little hope of securing this objective.

We believe that there should be much closer collaboration than formerly, between labour and management within the plant,—each giving due regard to the consumer's interest. This involves, primarily, responsibilities that management must undertake.

#### *Aids to Worker Objectives*

9. The development of the machine in modern industry has inevitably done much to destroy pride in craftsmanship. Even in industries not dominated by the machine, the simplification of tasks resulting from division of labour has had much the same effect. An alternative to the pride of craftsmanship is obviously

now needed. To name this as esprit de corps is not in any sense to solve the problem.

In order to perform effectively his own share in the process of production, the worker must feel a reasonable assurance within himself on certain fundamental matters:

### *A Live Management*

(a) He should know that the management is alive to his needs, solicitous for his interest in good times and bad, and willing to share with him the benefits of a period of prosperity.

### *Good Adjustment Machinery*

(b) The worker must be confident that arrangements for dealing with grievances are well thought out, and assure fair treatment to him under all circumstances.

### *A Sense of "Belonging"*

(c) He should also be made aware that his share in the task of production is something more than a performance of routine operations—that the benefit of his ideas and experience is sought, as well as of his skill and effort; that if he brings ideas to the notice of management, which improve the process of production, his own contribution to the plant's effectiveness will be recognized.

### *A Clear Field for Merit*

(d) Furthermore, the worker should know that opportunities of promotion, far from being restricted, are open to merit wherever it may be found; that management is on the watch at all times for men and women capable of taking positions of responsibility; that he can rise in the firm, as far as his own abilities permit; and that efforts on his own part to qualify for promotion, are at all times duly noted.

### *Educational Facilities*

(e) Incidentally to this, management should give much more thought than has been given as a rule in the past, to making use of programs for industrial and vocational, and even for general education, which will enable the worker to make the most of his latent capacities.

### *Benefit Plans*

(f) Many firms, of their own accord, have established benefit plans for their employees. The principle is capable of wider extension, and we look for its encouragement. The benefits which individual firms can establish may thus act as an effective supplement to governmental measures of social security—protecting workers with long and good service records against the vicissitudes of their working days, and enabling them to live the more happily when working days are over.

### *Works Councils, Production Committees and Unions*

(g) In order to secure the best of collaboration between workers and management, in the solution of problems which are common to both, we believe that labour in all its grades should be brought into closer association with management. A means to this end is the general adoption of works councils and production committees—of which there are already successful examples to be found in many Canadian enterprises.

## IV. RELATIONS BETWEEN MANAGEMENT AND ORGANIZED LABOUR

*Freedom to Negotiate*

10. We believe that employees, through the officers of their trade union or through other representatives chosen by them, should be free to negotiate with employers or the representatives of employers' associations concerning rates of pay, hours of labour and other working conditions, with a view to the conclusion of a collective agreement—

Mr. MacNICOL: May I interrupt with a question there? In reference to a collective agreement does that include collective bargaining?

Mr. McFARLANE: That is collective bargaining.

Mr. MORRELL—that every collective agreement should provide machinery for the settlement of disputes arising out of the agreement, and for its renewal or revision; and that both parties should scrupulously observe the terms and conditions of any agreement into which they have entered.

But, as has been stated in a recent brief on this subject by the executive committee of The Canadian Chamber of Commerce to the National War Labour Board and the members have been sent a copy of that brief, we believe it would be wrong to treat labour relations as if they were concerned only with avoiding strikes and dealing with wage demands.

Good labour relations require, on both sides, sincere purpose and a sense of humanity. They depend on morale—individual and national. Essential to them is a recognition that industry constitutes a partnership between owners, management, and labour—whose ultimate objective must necessarily be good service to the community.

We have suggested to the National War Labour Board that a national labour code be drawn up, and enacted into law; and in the brief presented to that body, have enumerated what we regard as the desirable features of such a code.

The CHAIRMAN: There may be some ground for questioning there. Do any members wish to ask any question on that part of the brief which has just been read?

Mr. MacNICOL: It is certainly interesting and foretells greater improvement in relations between labour and industry than it has in the past. In reply to my question as to the agreement I believe it was Mr. McFarlane replied it does not mean collective bargaining?

Mr. McFARLANE: That whole portion, No. 10, is a segregation from the relationship between employee and employer of normal efficiencies, health, accidents, and so forth, into bargaining elements or features of negotiation between management and organized or recognized labour representatives.

The CHAIRMAN: Are there any further questions? If not we will ask Mr. Morrell to go on.

Mr. MARTIN: I would like to ask a couple of questions. You spoke of production committees and you say at the bottom of page 12 that there are already successful examples. What examples did you have in mind, Mr. Morrell?

Mr. MORRELL: I think Mr. Huggett can answer that.

Mr. MARTIN: May I just preface that by saying that I think there are about 600 paper set-ups of these production committees in the country. Can you give us a general picture of how well they function?

Mr. HUGGETT: I am afraid I am not qualified to give that in substantial detail. We have these production committees in most of the plants in which my company is responsible for the direction. In the first instance, of course, they formed part of the works councils but with the demands for unionization the unions have objected to the works council and in several instances we have

found it necessary for the preservation of harmonious relations to withdraw the works council and substitute production committees. These production committees to the best of my knowledge consist of senior or supervisory men in the various departments who meet together periodically in the plant for the discussion of matters which are really outside the scope of any collective bargaining agreement such as safety measures, working conditions which are not provided for in any particular agreement, and improvements generally in the processes of the various operations, and matters of general interest such as welfare and things of that sort which are not provided for specifically in the collective bargaining agreement.

Mr. MACNICOL: I would like to ask one further question. Are you familiar with the set-up of the Dominion Foundries and Steel in Hamilton, how they co-operate with their men and how the men co-operate with them and the system they have introduced? We used to have something like it in the plant I was with, but I think Dominion Foundries and Steel is the best example I know of to-day of a sincere, earnest desire on the part of the management to see to it that the men are contented, by close contact with them in their homes, in their joys and sorrows and in the plant. Are you familiar with the Dominion Foundry?

Mr. McFARLANE: No, I am not. I am familiar with my own, and in answering Mr. Martin I would say there was one report passed over my desk recently, and in the last three months period in one group of girl operators there were 360 suggestions of which 200 odd were accepted for the improvement of their working conditions and the production of their work. It is an active, well established field of enterprise now.

Mr. MACNICOL: Well established through all industry?

Mr. McFARLANE: Not all, but a great many.

The CHAIRMAN: Are there any further questions? If not, Mr. Morrell will proceed.

Mr. MORRELL:

## V.—THE CONSOLIDATION OF SOCIAL WELFARE PLANS

### *A New Bill of Rights*

11. We repeat our conviction, expressed already, that more now depends on the mental and physical fitness of our people, than in any former time when the foundations of civilization were stronger.

Our objective is easily stated. With regard especially to the rising generation of Canadians, whose opportunities are ahead of them, it should be so to plan, that the population of this country, from the standpoint of health and strength, education and intelligence, enterprise and initiative may be second to none in the world.

We cannot, indeed, afford any lesser objective than this. In other words, removal of want and the fear of want is not enough. We need, instead, something like a new Bill of Rights for the Canadians of to-morrow.

Various of the proposals here made, in connection with topics other than social welfare, are obviously well-suited to this end. If mass unemployment can in a large measure be prevented, we shall not again witness the demoralization of large numbers of unfortunates, exposed through no fault of their own to long spells of unemployment. The large-scale rehousing of the population, already suggested as a legitimate object of government policy (by means of whatever fiscal changes may be necessary), should remove the slums which still stand as a reproach to many cities in Canada.

When workers are adequately housed, and are no longer haunted by the fear of prolonged unemployment, the foundations will have been laid, on which we can build more ambitiously for social welfare.

### *Nutrition and Education*

12. Much will remain to be done—in the fields of nutrition and education especially.

#### *Proper Nutrition*

(a) Wartime investigations have made evident a widespread lack of \*knowledge of the proper principles of nutrition, and as well, wide-spread mal-nutrition\* in many sections of our population.

Recent advances in the science of nutrition have equipped us, as we have not been equipped before, with the means of eliminating these evils.

We believe that government, by means of a sustained educational campaign, should ensure that ignorance of the principles of nutrition will no longer handicap Canadians, and especially Canadian youth, in the development of their mental and physical potential.

#### *A Right to Education*

(b) It should be recognized that children are a national as well as a family asset, and that the state should take such measures as seem practicably possible, without in any way weakening normal family ties, to the end that each child should in childhood receive a standard of living to assure normal health and growth as well as adequate education to qualify in adult life as a productive worker and a good citizen.

Any services for the welfare of children should be so designed as to assure that the benefits shall in fact accrue to the child and not be dissipated for more general family purposes.

#### *Assisted Education*

(c) Despite expenditure of vast sums on education in Canada, the fact remains that large numbers of Canadians do not continue their education, as they should, to the limit of their capacity for using knowledge.

This is a loss, not only to the children themselves, who leave school with an insufficient mental equipment, but also to the dominion as a whole. Our industrial effort is hampered. Of even more importance, failure to develop the latent capacities of our people is an impairment of democracy.

The national interest demands for each of us an education, limited only by the fitness of the person to benefit from it. In other words, all young Canadians of unusual intelligence and capacity should, for the sake of the dominion as a whole, be given opportunities of advanced instruction. The fact that they may come from poor homes ought no longer to bar them from such opportunities; as is too frequently the case to-day.

Canada pioneered in the provision of school education at the public charge, with no direct cost to the parents of children under instruction. But indirectly, the cost of providing their children with an adequate education has proven prohibitive to many parents. The time has come when, by means of a liberal system of scholarships and loans to children of unusual promise, positive assistance should also be given to those deserving advanced instruction.

---

\*In this connection, see *The Canadian Public Health Journal*, Volume 32, No. 5, May, 1941, which contains evidence from Halifax, Quebec City, Toronto, and Edmonton; also, *The Canadian Journal of Public Health*, Volume 34, No. 1, January 1943, which contains evidence from Winnipeg.

Malnutrition of the kinds therein described is, of course, not confined to Canada. Speaking on the 26th May, 1941, at the Nutrition Conference for Defence in Washington, Mr. Roosevelt said:

"In recent years scientists have made outstanding discoveries as to the amounts and kinds of foods needed for maximum health and vigour; yet every survey of nutrition by whatever method adopted shows that here in the United States, undernourishment is widespread and serious."

### *Planning for a Better Race*

13. These are measures outside the general connotation of the term social security. Nevertheless, they should be made an integral part of our plans for a better race of men and women. Adequate housing, the confident expectation of gainful employment, a standard of nutrition based on up-to-date knowledge, and wider opportunities for education in accordance with the democratic idea—these four proposals together have a common purpose, the *prevention* of disease, delinquency, maladjustment and inefficiency.

We have already suggested that, in default of them, social insurance itself may mean little more than the sharing of a common poverty.

### *Social Insurance Factors*

14. To say this is not in any sense to deprecate the possibilities of social insurance.

We believe that, so far as this is possible, the citizen should be assisted in establishing for himself, protection against mischances (including in particular, ill-health and unemployment) which are due to no fault of his own. The distressing experience of the decade ending in September, 1939, when large numbers of hitherto self-supporting Canadians were dependent on improvised public relief schemes, must never be repeated. Orderly planning must replace relief.

We recognize also that a large proportion of our population does not save enough to provide its own subsistence in old age; and the passage of the existing legislation providing for old age pensions, by the dominion and the provinces, recognizes explicitly that government has an obligation to share the superannuation cost of those who lack means in old age.

The cost of provision by government against these evils is now shared, in almost all civilized countries, by three contributors. Part of the cost is borne by the person assured; part by his employer; and part by government, at the taxpayers' expense.

The benefits of an integrated scheme of assurance, against all of the risks above-mentioned, are two-fold:

(a) Financial provision is made, on a scale adequate to the cost of such over-all protection; and

(b) Benefits to the persons assured are put on a basis of statutory right—the system is not tinged with charity.

Provision of these benefits for each individual citizen need not in any way lessen his own self-respect; indeed, is an encouragement of personal thrift, since the citizen is thus given a foundation on which to build for his greater comfort and security.

We regard it as axiomatic that benefits in their dimensions or the terms of their distribution should not impair the citizen's desire for work and the betterment of his position in life. Social security should not be regarded as an uncovenanted blessing received from an impersonal organization, called the state—but as something built up with much effort, by countless individuals.

We therefore visualize a post-war scheme of social insurance covering this dominion, in which existing plans for unemployment insurance and old age pensions will be consolidated, and in which provision will also be made on an adequate scale against ill-health—the cost of the whole being equitably shared, here as elsewhere, among the three contributors above-mentioned.

The CHAIRMAN: I take it that the following paragraph ends with a general provision and it is only inclined towards caution. It might be well if we put that on the record, or were you just going to read it?

Mr. McFARLANE: I was just going to finish off the social welfare section.

### *Growing Rigidities of Business*

15. Nevertheless, we feel disposed towards caution in approaching proposals of this kind. For the social cost of establishing such a nation-wide system of

social security should not only be measured by the size of the necessary contributions and disbursements, or by the load on the budgets of the governments concerned, which an adequate provision against the named hazards will involve. There is an indirect cost also, not capable of direct measurement, but nevertheless of such a character that we cannot safely disregard it.

This cost is unrecognized by the public at large, and demands careful explanation. But it is necessarily present, whenever government brings to fruition a plan which:—

- (i) involves an addition to the taxes, and to the taxpayers' fixed charges;
- (ii) levies a contribution from employers, and so raises the fixed charges of business and consequently the cost of goods; and
- (iii) necessitates a compulsory deduction from wages, thus narrowing the current free spending power of wage-earners.

The general effect of these provisions is:—

(a) to make somewhat more rigid the cost of doing business, in all firms covered by these arrangements; and

(b) to make acceptance of any wage reductions at any time, by the mass of employees, somewhat more difficult than it otherwise would be—no matter how compelling the circumstances as a result of which (if the normal volume of goods is still to be produced and marketed) wages must be lowered.

At some risk of it being suspected that we make too much of a fancied danger, we venture to dwell for a moment (and from a somewhat unusual angle) on the common experience of all industrial countries, during the past generation.

For various reasons, the fixed charges of business have tended almost everywhere to become increasingly heavy, during the present century; the cost of doing business has thus tended to become steadily more rigid than it was during the nineteenth century.

Because of this increasing rigidity, business is less able now to make quick adjustments, rendered necessary by sudden and unforeseen changes in economic conditions, than in earlier times.

But the surrounding economic conditions have not, meanwhile, become more stable; as everybody knows, they have become progressively less stable. The terms "inflation" and "deflation" have acquired a new meaning of late years. We have experienced a depression, the like of which had not been seen for at least two centuries.

There are no nations of importance, which were not compelled at least once, in the period between 1919 and 1939—and many countries were compelled several times—to devalue their currencies *because of internal rigidities leaving them no means of making adjustments internally, to changed outside economic circumstances.*

The consequences of unstable currency conditions and unstable exchange rates, for hundreds of millions of workers, were deplorable: and none the less tragic, because the victims themselves misunderstood the causes of their distress.

The CHAIRMAN: Are there any questions?

Mr. MACNICOL: I would like to ask Mr. McFarlane a question. I do not expect him to answer this unless he cares to answer it. Has the Chamber of Commerce considered what has been suggested here by many members of the House that the old age pension limit should be reduced from seventy to sixty-five and that the pension itself should be increased from \$20 to \$30 a month?

Mr. McFARLANE: We have given no consideration to that.

Mr. MACNICOL: You would not care to pass upon that?

Mr. McFARLANE: No. I would comment as a personal observation that within limits if you reduce your age of retirement or payment of pension you vitalize the country accordingly.

Mr. MacNICOL: You are familiar, of course, with the fact that in New Zealand, Australia and England the age limit is sixty-five and that the pension is equivalent to \$30 a month?

Mr. McFARLANE: I am making a personal observation.

Mr. MacNICOL: I must say, Mr. Chairman, that sections 4 and 5 certainly contain very valuable information. It will be a great comfort throughout Canada for workers everywhere to know that the Chamber of Commerce is in this presentation strongly behind what so many friends of labour here have been advocating for many years. If we can ever get everything that is suggested in sections 4 and 5 in operation as the law of the land it will go a long way to relieve the sad experiences the working populace has had inflicted on it in the past.

Mr. McFARLANE: I think it is the opinion of the committee that prepared this brief that these are all obtainable.

Mr. MARSHALL: Mr. Chairman, no doubt the Canadian Chamber of Commerce will be back again on some future occasion. I wonder if in the meantime I might draw to their attention a very excellent report which has been put out by the London Chamber of Commerce on General Principles of a Post-War Economy. With your permission, Mr. Chairman, I would like to read the foreword and a couple of paragraphs in this report. The foreword reads as follows:—

A special committee was appointed by the council of the London Chamber of Commerce, on the 10th of March, 1942, to consider and report on post-war reconstruction. That special committee took the view that it could not usefully consider the many secondary problems which would arise, both in the period of transition from war to peace and in the subsequent period, without first ascertaining the view of the council upon the framework within which the future economic system should be built. The special committee therefore submitted the enclosed preliminary report dealing with these questions of major policy.

The report was received and adopted by the council at its meeting on the 12th May, 1942, and the special committee was congratulated and requested to make a further report on the assumption that the detailed problems which will face the nation at the end of hostilities will call for solution within the framework here envisaged.

A. de V. LEIGH,

*Secretary.*

69, Cannon Street, E.C. 4.

The opening paragraph of this report states as follows:—

The London Chamber of Commerce has a direct membership of 9,000 firms and companies. Thirty-nine industrial and commercial associations, with an approximate membership of 50,000, are affiliated to it and are represented on its council. The Chamber is therefore vitally concerned in the nature of the framework within which industry and commerce will be called upon to function after the war.

The report is very brief. I think there are thirty-eight clauses altogether, but clause No. 27 reads as follows:—

The Chamber, having considered whether there is any system which would achieve, wholly or partially, the solution of all the above problems, generally accepts the principles laid down in "A Twentieth Century Economic System," especially in respect of blocked credits for the payment of international obligations.

These two pamphlets are very short and I believe that they are well worth studying. I would suggest to the members of the Canadian Chamber of Commerce that they obtain copies of these and study them very carefully.

Mr. McFARLANE: They have already been under our consideration.

Mr. MARSHALL: They are worthy of consideration, Mr. Chairman, and contain the views which we as a group in the House of Commons have been advocating for a considerable number of years.

Mr. McFARLANE: There are a number of associated reports, which were issued simultaneously with that by other groups in the United Kingdom, to which we have given careful consideration and study.

The CHAIRMAN: Any further questions?

Senator ROBERTSON: I should like to ask Mr. McFarlane about a paragraph on page 16 just before section 15 begins:—

We therefore visualize a post-war scheme of social insurance covering this dominion,

and so on. Does that contemplate that a governmental scheme will replace those schemes at present in existence in many businesses with respect to old age and the care of employees? For instance, in the banks and in a great many of the larger concerns there are types of contributory old age pensions, retiring allowances. Is it contemplated that this will replace that?

Mr. McFARLANE: It will be complementary, or an adjunct thereto, and will not replace it. I do not think that any government scheme should in any way prejudice plans already properly in operation and with a good deal of experience behind them. The insurance plans envisioned here are an adjunct or an auxiliary to those and to take care of such groups of people as are not covered by corporate benefit plans.

Senator ROBERTSON: I do not think that anybody could oppose the idea of that. It seems to me it is splendid that it should be developed, the idea of contribution and the providing for old age and the uncertainties, but where do the great mass of people who are not employed in businesses or companies fit in as far as the future is concerned? Farmers, small businesses, fishermen, contribute through taxation and through the cost of services or goods of these particular firms which have these plans in effect; what is going to become of the farmer and the fisherman and small businesses that do not have these plans?

Mr. MacNICOL: He qualifies under the present Act.

Mr. McFARLANE: Again I make a personal observation. If they are contributors and benefits are indicated then benefits should be paid regardless of their status in the community as farmers or anything else. If he earns and pays for a pension contributed to by him he is entitled to benefits when those benefits are earned by inevitable old age which is the cause of superannuation mentioned in this report. Speaking for the committee we feel that if there is a social security plan then all the benefits are distributed throughout the country to people who have earned them. Earning a pension is the cost of growing old. Mr. Phillip Fisher is really the author of this section and I think he can speak with greater authority on it than I can.

Mr. FISHER: Mr. Chairman, I think Mr. McFarlane has answered the question. Obviously in detail when you start to insure the small business man or individual operators like farmers the question of the contribution of the employer does not come into the picture, but I think that the Chamber of Commerce contemplates that any person engaged in business on his own account shall have extended to him the privilege of participating in these insurance schemes so that a man and his wife who operate a little corner utility store would be able to make contributions and receive benefits in the form of old age pensions

and health schemes and things of that sort. Of course, I think we all recognize the difficulties in the way of insuring the farmer against unemployment. I think some of those details would have to be worked out, but it was not our intention to restrict contributions to health insurance or to old age pensions purely to employe industrial workers.

Mr. MACNICOL: Under the present Act the people who have been mentioned, farmers and others, are protected. That is under the Old Age Pensions Act. In Australia it is automatic. Even if a man is a millionaire when he reaches sixty-five years of age, as I understand, his old age pension cheque is sent him, whether he accepts it or not. We have not reached that high standard in Canada yet, but certainly the ordinary individual, the ordinary worker, never would consent to the abrogation of the present Old Age Pensions Act. In fact, it is advocated that we increase the pension to \$30 a month. If the banks and other big businesses wish to have their own schemes they could work in co-operation with the Old Age Pensions Act.

Mr. FISHER: May I have another word?

The CHAIRMAN: Yes.

Mr. FISHER: I think it is certainly visualized that the introduction of a contributory old age pension scheme would be progressive. Obviously all these long range benefits must be predicated on the building up of an equity by contribution. Certainly it is recognized that for some years there would not be the building up of equities through contributions. I think it is generally recognized, and has been recognized in other countries, that until the old age insurance scheme has been going long enough to build up these values that a state benefit through government grant predicated on the need must be continued. There is no implication to be taken out of the Chamber's brief that we would propose immediate insurance on a contributory scheme which would involve old age benefits to the elimination of the present old age pension legislation, but we would hope that ultimately when the contributions had built up financial reserves that the value of the pensions would be higher and, of course, they would not be subjected in any way to a means test.

Mr. McFARLANE: May I file this little booklet entitled "The Problem of Unemployment"? It is the Lever Brothers' plan. I think it is a contribution to this discussion and to our brief.

Mr. MACNICOL: Will there be one for each of the members of the committee?

The CHAIRMAN: Mr. MacNicol wants to know if you could provide one for each member of the committee. That is quite a number. Some of us have them. Ladies and gentlemen, in a way I am sorry that we were not able to conclude the evidence of the Chamber of Commerce today. In another way I am very glad we did not finish. I think that the committees will receive more benefit from the fact that we have had a partial study today and that on another occasion we will have the members of the Chamber of Commerce before us again. I am speaking for the House of Commons committee, and I am sure for the Senate committee, when I express deep appreciation of the study that has been made by the Chamber of Commerce in the preparation of this brief which they have submitted to us. Just when the Chamber of Commerce will be before us again I cannot tell you at the moment. We will have to arrange a date but it will not be next week. I hope it will be some day in the second week from now. For the information of the members of the committee we will have Premier Garson of Manitoba before us on Wednesday next and the Canadian Pacific Railway through their vice-president, Mr. Neal, with us on Thursday next. I once more express our appreciation and I suggest that somebody move the adjournment.

Mr. MACNICOL: Before the adjournment is moved would you add some compliments on the excellent preparation of the brief and the condition in which it was presented to us.

The CHAIRMAN: I thought I did that. That can be made part of what I said.

Mr. GILLIS: Mr. Chairman, in view of the importance of this brief and the discussion we are carrying on on the social security phase of the matter would it not be possible to continue this meeting tomorrow? It is rather unfortunate to break it up.

The CHAIRMAN: I discussed that this morning. They will not be ready to come before us tomorrow.

Mr. GILLIS: That is rather unfortunate because if you let this go for two or three weeks it breaks the continuity of the thing.

The CHAIRMAN: It will not be convenient for them to be with us tomorrow. I discussed that before we came in here today. Without question there will be another meeting.

Mr. MACNICOL: I move the adjournment.

The committee adjourned at 1.10 p.m. to meet again at the call of the chair.







Doc. 1000  
Special Committee, 1943/44

SESSION 1943

(HOUSE OF COMMONS

(SPECIAL COMMITTEE

ON

(RECONSTRUCTION AND RE-ESTABLISHMENT

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 19

WEDNESDAY, JUNE 2, 1943

WITNESS:

Hon. Stuart Garson, Premier of Manitoba.

OTTAWA  
EDMOND CLOUTIER  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1943





## MINUTES OF PROCEEDINGS

WEDNESDAY, June 2, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 10.30 a.m. Mr. J. G. Turgeon, the Chairman, presided.

The following members were present: Messrs. Authier, Bence, Bertrand (*Prescott*), Castleden, Dupuis, Eudes, Gillis, Hill, MacKenzie (*Neepawa*), Mackenzie (*Vancouver Centre*), MacNicol, McDonald (*Pontiac*), McKinnon (*Kenora-Rainy River*), Martin, Matthews, Nielsen, (*Mrs.*), Quelch, Ross (*Calgary East*), Ross (*Middlesex East*), Sanderson, Turgeon and Tustin—22.

Also present were: Hon. Senator King, Hon. Senator Lambert and Hon. T. A. Crerar, Minister of Mines and Resources.

The Chairman reminded the Committee that the meeting to-morrow would be at 10 o'clock, a.m.

The Chairman read a circular letter which had been sent by him to the Premier of each Province.

Hon. Stuart Garson, Premier of Manitoba, was called. He presented a brief, and was examined by the Committee.

Professor W. J. Waines, University of Manitoba, was introduced to the Committee by the Chairman.

Premier Garson stated that he would be glad to supply the Committee with copies of the report of a special committee of the Universities of Manitoba and Minnesota.

By leave of the Committee Mr. Graham, M.P., examined the witness.

On motion of Mr. MacNicol a vote of thanks was tendered to Premier Garson for his splendid contribution of evidence.

The Committee adjourned at 1.05 p.m. to meet again Thursday, June 3, at 10 o'clock, a.m.

J. P. DOYLE,  
*Clerk of the Committee.*



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,  
June 2, 1943

The Special Committee On Reconstruction and Re-establishment met this day at 10.30 a.m. The Chairman, Mr. J. G. Turgeon, presided.

The CHAIRMAN: Ladies and gentlemen we have a quorum and if you will come to order we will start proceedings. First of all may I remind you that we meet tomorrow morning at 10 o'clock in the same room for the Canadian Pacific Railway Company. This morning we have with us the Hon. Stuart Garson, Premier of Manitoba. Just in order to have it on the record, because I see that Premier Garson refers to it in his brief, I am going to read one paragraph of a letter that the chairman of your committee after a meeting of the steering committee wrote to the various premiers. The letter to Premier Garson, of course, was the same as the others. It reads:

OTTAWA, Ont.  
April 16, 1943

Hon. STUART GARSON,  
Premier of Manitoba,  
Winnipeg, Man.

Dear Mr. PREMIER: I am writing you on behalf of the House of Commons on post-war reconstruction and re-establishment. We are anxious that there should be sincere and effective co-operation between the dominion and the provinces in making plans for the post-war period. We are, therefore, inviting representatives of each province to appear before our committee for the purpose of acquainting us with what they expect will be their provincial post-war problems, and to advise us what solution of these problems is proposed by the province. That is, we would like to know, not only what federal assistance may be desired, but what the provinces think they themselves may do to meet conditions as they arise at the end of the war.

The rest of the letter refers to dates. Premier Garson is the first provincial premier to be with us. I hope in the course of time we will have all nine premiers. Without any further remarks I will ask Premier Garson to please present his brief.

Hon. S. GARSON, *Premier of Manitoba, Called*

The WITNESS: Mr. Chairman, ladies and gentlemen: May I first of all express my appreciation for this opportunity of presenting the views of the Manitoba government. In the presentation of them I should like to emphasize at the outset that what we say today is entirely an interim statement. It seems to us that in post-war planning what we are really engaged in is a race with time to get ready in all the engineering, technical and legal details a complete program for prompt implementation very soon after the declaration of peace. The time element is of the highest importance because the race with time will not be won if we do not heed it. For that reason matters which we in Manitoba would regard as of the first rank of importance, such for example as securing for agriculture a more just share of the national income, we do not

raise at this stage. We know that, at any rate, so far as western agriculture is concerned a very large part of its production goes into export. We cannot raise export prices by any action we may take in Canada, and therefore if we are going to increase the share of the western farmer's income we can only do so by reducing his costs of production. That means reducing the moneys which he pays for the goods and services supplied to him by other economic groups. That in turn means that we will be attempting to reduce the share of national income which is presently enjoyed by these other groups. These groups are powerful and highly organized. If the past is any criterion, they are not going to acquiesce gracefully in the proposals to reduce their share of the national income; so that the task of increasing the western Canadian farmer's share, at any rate, is likely to be a controversial task and one which will take considerable time to achieve.

In the meanwhile if we are so pre-occupied with the talk I have just referred to, that for the lack of a post-war program complete and ready to go to work in all its details, our whole economy collapses into a state of depression as we had in the 1930's, and those who are qualified, tell me that if we are not ready that very thing may happen, then the national income itself will steeply decline and everyone, our farmers in Manitoba included, will suffer. Thus while what we discuss today is not more absolutely important than that agriculture should have a proper share of the national income, it is perhaps at the moment more important in point of time.

What is our position today in relation to the matters we do propose to discuss? I think it can be shortly stated in this way. The Canadian Constitution has determined what the provincial share in post-war reconstruction shall be. The Canadian Constitution has determined what the provincial financial resources after the war will be. As far as we in Manitoba can judge provincial post-war financial resources so determined will not support the provincial share of the post-war program so determined. If we are sincere in our desire for an effective post-war program we must either increase the province's financial resources by federal adjustment grants, or we must transfer from the provinces to the dominion a large part of what is now the province's constitutional responsibility for the post-war program. If we do not do either or some of both of these things we will not have an adequate post-war program in Canada. And the sooner we know which alternative we are going to adopt the sooner the provinces and the municipalities can plan their part of the work intelligently. Finally in our judgment it is imperatively necessary that this question be settled as soon as possible.

You, Mr. Chairman, in your letter to me dated April 16th, 1943, asked us what we expect will be our post-war problems. Our two main post-war problems in Manitoba will be to provide employment for those who can work and to provide adequate social security for those who are unable to secure for themselves a minimum standard of subsistence and medical care. In other words, our Manitoba problem is the same as, and is part of, the national problem rather than a provincial problem.

This national problem as I have noted is twofold. In the first place, at the end of the war we must seek to achieve in the fullest possible measure the employment of employable persons. The disaster which overtook us in the 1930's demonstrated the distress and misery which accompanies a prolonged period of mass unemployment, and the experience of this war has convinced many people that such conditions need not be tolerated. It is only by reaching full employment that the national income can be maintained at a sufficiently high level to secure the standard of human welfare which is our aim and to support "social security" on the broad scale visualized in the Beveridge and Marsh reports.

But, of course it does not follow that the elimination of mass unemployment will of itself eradicate individual misfortune or poverty. There will still be individual short comings; there will still be sickness and accidents which add substantially to the expenditures of the family and interrupt its earning power; and there will be temporary unemployment and old age wherein earning power is interrupted or terminated. Thus the second branch of our post-war problem is to provide what is generally referred to as "social security". Our failure to solve the first part of our problem—mass unemployment—will make it impossible to solve the second part by providing social security. Our success in solving the first part of our problem will greatly facilitate the solution of the second part by reducing the need for social security and increasing the national income out of which the cost of social security must be paid.

You asked us further what solution of our post-war problems we propose. Our answer is that since the provision of employment and of social security is a problem national in nature and in scope, it is, we suggest, one which can only be solved by a national program. We do not think that it can be solved by nine uncoordinated provincial programs. May I interject here that we are aware that private enterprise has an important part to play in post-war reconstruction. But the magnitude of the task will be such that governments will be under a clear responsibility to eradicate any residual unemployment and to provide social security. In carrying out this task they should and no doubt will collaborate with private enterprise.

Hence, I would like at the outset to emphasize that we conceive our duty in Manitoba in post-war planning to be that of co-operating in the fullest possible measure with the dominion government and its planning committees, and officials—including your own House of Commons committee—in the preparation of a properly coordinated all-embracing national plan for Canada, of which what we propose to do in Manitoba will be a part.

In this national plan we expect that Manitoba's needs for employment and social security will be met. You of the central planning committees have a right to expect us in co-operating with you to keep you advised of the steps which we are taking to ascertain what our post-war employment and social security needs will be. In our present submission we shall endeavour to lay before you what has been done by us to date and what we propose to do. We shall also indicate the manner in which we think that the post-war projects of the Manitoba government and Manitoba municipalities can fit in with the national plan for providing full employment.

Under the Canadian federal system of government a large part of this national plan will have to be carried out by provincial and municipal governments.

If there were any doubt upon that score—and I am sure that there is not—one might refer to the evidence given before your own committee by Mr. Cameron, the Chief Engineer of the Department of Public Works and Chairman of a Subcommittee of the James Advisory Committee on Reconstruction, which is reported at page 77 of the Minutes of Proceedings and Evidence of this committee. There Mr. Cameron indicates, under the heading of public projects, that those which are constitutionally the responsibility of the federal government are: Public buildings—that is, federal public buildings; harbour and river works for navigation, including canals; government telegraph lines; dominion parks; experimental agricultural farms and stations and forestry stations. Those which were under National Agency were indicated as: The government-owned railways; national harbours; the Canadian Broadcasting Corporation; Trans-Canada Airways.

I am sure that any one reflecting upon the matter for but a moment would realize that if we are going to have a post-war program in this country that

will remotely approach adequacy, it cannot possibly be confined to public projects of the nature of those to which I have referred. It has to go far beyond that; and when it goes beyond that, according to Mr. Cameron—with whom I agree—it becomes a provincial responsibility.

In view of that fact, Mr. Chairman, perhaps the chief, and certainly an indispensable, contribution which we may hope to bring to your deliberations is a statement as to how or whether those parts of a national plan which come under our jurisdiction can be financed and carried out.

There is not in existence to-day to our knowledge a national plan. There have been put forward, however, not, as I understand it, as dominion government policy but as proposals for consideration by central committees having to do with post-war planning, the report on social security for Canada by Dr. L. C. Marsh, report of the advisory committee on health insurance, and report of the survey committee of the Canada and Newfoundland Education Association. These reports, although tentative, can be usefully discussed, we think, as they illustrate the type of difficulties which the Manitoba government—and other provincial governments, as well, no doubt—will have to overcome in carrying out its provincial share of the social security branch of a national plan. The same sort of difficulties will have to be overcome in connection with the developmental and other employment creating projects of the Manitoba government and its municipalities which we shall propose for inclusion in the national plan.

In discussing these difficulties we shall suggest the means by which Manitoba can be placed in a position to overcome them. These suggestions we hope will answer your third question, Mr. Chairman, as to what federal assistance we shall need. The enumeration of our provincial and municipal projects, moreover, we hope, will answer your fourth question as to what we think the province of Manitoba and its municipalities may do at the end of the war.

#### MANITOBA'S PRESENT AND FUTURE FINANCIAL POSITION IN RELATION TO THE DOMINION-PROVINCIAL TAXATION AGREEMENT

At the present time Manitoba is operating under a Dominion-Provincial taxation agreement. Under this agreement, which is effective for the duration of the war and one year thereafter,

(1) The Manitoba government agrees to abandon in favour of the dominion government its right to impose taxes upon incomes and corporations.

(2) The dominion government agrees to make to the Manitoba government in lieu of the provincial income and corporation taxes so abandoned a cash payment of \$5,054,740.92 per annum, and it also agrees to guarantee to maintain the gasoline tax and liquor revenues of the Manitoba government at the levels at which these revenues stood in certain base years. The result of this agreement is that for its duration no less than 77 per cent of Manitoba's revenues are guaranteed or constant. But when, upon its expiration we shall no longer have our liquor and gasoline tax revenues guaranteed, and we shall no longer receive from dominion government in lieu of income and corporation taxes an annual cash payment of \$5,054,740.92, we shall then have to make up this sum by the re-imposition of provincial income and corporation taxes. These new provincial taxes will have to be superimposed upon dominion taxes of the same kind which themselves will then be at much higher than pre-war levels. The predicament in which the provinces will find themselves, therefore, upon the expiration of this dominion-provincial taxation agreement one year after the end of the war will be a serious one. On the one hand, the cost of putting into effect Manitoba's share of the national post-war plan will far exceed any

previous over-all cost of government in Manitoba. We anticipate that the cost of putting into effect Manitoba's share of a post-war plan will exceed the entire cost of government in the province of Manitoba at any previous time in its history. On the other hand, the probability is that, upon the expiration of this agreement, Manitoba in common with the other provinces will get back her fields of taxation from the dominion subject to the dominion government's need to continue to exploit those fields—that is, the fields of corporation and income taxes—to an extent which will leave an inadequate residue of taxable capacity for the province to exploit. From these fields already fully occupied by the dominion government the Manitoba government—and other provincial governments as well, no doubt—may be embarrassed in obtaining the provincial revenues she will need to replace those which the dominion government is now paying her under this taxation agreement. This will leave the province with wholly inadequate revenues to provide for a greatly expanded program of expenditure.

#### THE ALTERNATIVE APPROACHES TO THE CONSTITUTIONAL PROBLEM INVOLVED IN POST-WAR RECONSTRUCTION

As an illustration of the increased cost of providing social security in the post-war period and the increased costs of government for all other post-war purposes in the provincial field, let us examine this broad field of social security. At the present time, as matters now stand, only one part of the existing social security program—unemployment insurance—is a national plan and responsibility. All the rest are either wholly provincial (workmen's compensation and mothers' allowances) or are under provincial administration with financial assistance from the dominion government in the form of grants-in-aid (such as old age pensions, pensions for the blind, vocational training). It is clear from this that the provinces are already carrying a very large share of social security expenditure. If we may consider the Marsh Report as comprehending the whole field of social security, we note in the first place that there are certain important phases of a comprehensive scheme which have not yet come within the field of either dominion or provincial legislation. These are health insurance, allowance for widows (other than mothers of young children, who, of course, benefit under the mothers' allowances) maternity benefits, family allowances and death benefits. If these items are to be contemplated, as they are in the Marsh report, as additions to the present Canadian social security program, it is perfectly apparent that governmental costs will be multiplied, to say nothing of the additional cost of providing any proposed larger benefits under existing legislation.

Now may I refer to the submission of the Hon. Ian A. Mackenzie, Minister of Pensions and National Health, before the Special Committee of the House of Commons on Social Security. In his statement on March 16th, 1943, the Hon. Mr. Mackenzie pointed out that all the branches of a comprehensive social security program which are not yet incorporated in provincial or dominion legislation—namely, health insurance, allowances for widows, maternity benefits, family allowances and death benefits—were "assumed to be in provincial jurisdiction". This is in addition to old age pensions, and pensions for the blind, which are held by the dominion to be the primary responsibility of the provinces, and in which dominion participation is merely by way of assistance. According to Mr. Mackenzie, therefore, those portions of a social security program which have not yet been implemented are a provincial responsibility.

The constitutional problems involved in social security are acknowledged by Hon. Mr. Mackenzie. On page 5 of the Minutes of Proceedings and Evidence of the Special Committee on Social Security, he states that if we accept the

Beveridge report as a guide, one of three important problems to be considered is "the practical and constitutional problem of unification of our existing social services and pension schemes."

While admitting the advantages of unification of our social services under one jurisdiction, Mr. Mackenzie is apparently of the opinion that for practical reasons such a step cannot be contemplated at this time. As we in the province of Manitoba see the problem there are only two possible approaches to the correction of the inadequate financial status of the provincial governments. One approach is to place many of these new and enhanced social services within the orbit of dominion responsibility. The other is to increase the financial resources of the provinces not by federal conditional grants but by federal "adjustment grants" made upon the basis of genuine fiscal need.

*By Mr. Martin:*

Q. Do you express which preference you make?—A. Yes, we do; such preference as between the two alternatives? Yes, I think that is clearly implied in the remainder of my remarks.

Such adjustment grants will enable each province to maintain its social services at the desired level and have the effect of broadening the tax field supporting social services in Canada.

In Mr. Mackenzie's opinion, the most significant gap in our existing social security system is in the field of health. This problem has been studied by an advisory committee of government officials reporting to the Minister of Pensions and National Health; and a health insurance scheme has been advanced. This scheme illustrates quite clearly the difficulties into which the provinces are likely to be led under the present allocation of governmental functions and taxing powers.

Mr. Mackenzie stated that there are six principles underlying the health insurance plan. I am quoting three of them. The other three are not relevant to my present argument.

4. That public opinion and efficiency demand to the greatest possible extent a national plan.
5. That the constitution, as at present understood and interpreted, prevents the dominion parliament from adopting a single comprehensive national health insurance scheme.
6. That, for practical reasons, a constitutional amendment is not desirable.

Mr. Mackenzie conceded that there are strong arguments for a national plan of health insurance. The strongest of these is that "if any one province adopts an advanced and expensive reform, it imposes a burden of taxation which is considered to involve a handicap upon the industrial life of that province in competition with other provinces". This statement applies with particular force when the industrial life of the province is closely dependent, as the three western provinces are, on export markets in which the competitive factor is particularly important. Even in respect of such a dominion scheme as that now proposed Mr. Mackenzie's observation also applies. Some provinces may come under the scheme; others may stay out. Even if all come under the dominion scheme the cost of the provincial share thereof will represent a much heavier burden upon the taxable resources in one province than in another.

It will represent a much heavier tax burden, for example, upon the province of Manitoba than upon the province of Ontario; upon the province of Saskatchewan than upon the province of Quebec.

In spite of the cogent arguments in favour of a national plan, however, the constitution was considered to be an obstacle which could not be overcome at this time. It was considered that a national scheme of health insurance and a

national public health program would encroach so extensively on the provincial power of legislating with respect to "civil rights" that dominion legislation would certainly be challenged in the courts. The only way out of this impasse would be by constitutional amendment—a step which was considered undesirable for practical reasons.

Consequently in its proposal the Advisory Committee on Health Insurance, and I quote from that report, "has avoided a constitutional amendment, it has left primary jurisdiction where it is, it has left the ultimate decision with the provinces, it proposes leadership in co-operation and standards by the dominion, and it proposes grants-in-aid.

" . . . the dominion government will assist the provinces, both with respect to health insurance and with respect to a public health program, but will not help a province with regard to either one of these projects unless both are put into effect." (House of Commons Special Committee on Social Security, p. 21.)

Mr. Mackenzie points out that the proposals respecting a public health program follow the recommendations of the Royal Commission on Dominion-Provincial Relations, in that this commission suggested that the matter be left within the jurisdiction of the provinces. But may I point out that while Mr. Mackenzie has followed the recommendation of the commission with respect to the retention of provincial responsibility in matters of public health, he has not followed its recommendations with respect to the financing of these services. We suggest that the commission clearly intended that these two recommendations were so related that if the first were followed, the second should be followed also. Certainly there is no purpose in our judgment in accepting, as Mr. Mackenzie has done, the commission's recommendation concerning the provincial responsibility for public health if the provinces are left without the financial capacity to discharge that responsibility. The Sirois commission's second recommendation with respect to the financing of social services is in our judgment of such great importance that we set it out hereafter in full. In so doing I wish to emphasize that I do not know of any alternative method of enabling the provinces to finance social services having been recommended by any other responsible body. The quotation follows:—

In the services which will remain exclusively to the province and its municipalities such as mothers' allowances, child welfare, and poor relief, we foresee expansion and hence rising expenditures. Further, under the division of function in the public health field which we have recommended, expansion in provincial and municipal expenditures is likely to be proportionately much greater than in those of the dominion.

Here may I interject that the commission's foresight is entirely borne out by the report of the Committee on Social Security and by Mr. Mackenzie's observation, which suggests that the great bulk of the—no, indeed all of the new phases of social security shall be a provincial responsibility.

"Hitherto there have been wide differences in the financial ability of the provinces to supply welfare services. Moreover, in some provinces, and notably Quebec, religious organizations and private charitable associations have provided services which, in other provinces, were wholly or almost state functions. For these and other reasons there have been wide differences in provincial expenditures, in the proportion of expenditures which the provinces compelled the municipalities to carry, and in the quality of state services. In the interests of national unity it is highly desirable that every province should be able to provide these services in accordance with average Canadian standards. Fiscal justice also demands that the municipalities should not be required to carry an undue proportion of the load. These desirable conditions might be attained in either of two ways: the provinces might be assisted by dominion grants-in-aid (apportioned in

accordance with provincial needs) for particular provincial services"—may I interject here to say that the commission visualizes two alternatives and they describe one of them as follows: "They may be assisted by dominion grants-in-aid." But may I point out, Mr. Chairman, that the grants-in-aid, to which they refer, are not grants-in-aid of a kind that the dominion will pay a dollar if the province puts up a dollar. The grants-in-aid that the commission refer to are grants-in-aid apportioned in accordance with the provincial need, which is a totally different thing; and I would not want to leave the impression with the committee that the Sirois Commission regarded grant-in-aid consisting of the payment of matching amounts by the dominion and the provinces, as even a possible alternative. The grants-in-aid here referred to in the Sirois commission report are grants-in-aid based upon provincial need.... Perhaps I had better read the whole sentence again.

"These desirable conditions might be attained in either of two ways: the provinces might be assisted by dominion grants-in-aid for particular provincial services, (apportioned in accordance with provincial needs) or every province might be put in a fiscal position to determine its own policies and to finance its own services in accordance with its own peculiar needs. It is assumed that in either case the provinces would pass on some of the benefits to the municipalities. In view of the wide differences in social philosophy and economic and social conditions among the provinces, and in view of the fact that local, detailed, and highly personal administration is often required in the services which we have recommended should be left to the provinces, we think that the second method is highly preferable."

"Our financial recommendations aim to place every province in a position to finance its own social welfare program in accordance with average Canadian standards, and to make such adjustments with its municipalities in the financing of this program as seems to it reasonable. Moreover, provision for periodical revision of adjustment grants and for emergency grants should enable each province not only to protect its standards in social services, but also to improve them at the average pace maintained by the provinces as a whole. This method we believe will insure to the provinces not only the capacity to provide reasonable welfare services for their people, but complete autonomy—" Mr. Chairman, I submit that it is only by this method that complete autonomy can be provided for all the provinces, "in the formulation of their social welfare policies, in the choice between alternative services and between alternative methods, and in the administration of their services."

"This does not rule out the possibility of dominion assistance by grants-in-aid for particular services (e.g. mothers' allowances or special health measures) should the dominion so decide. It is indeed possible that dominion assistance of this sort might be a means of improving, or co-ordinating, or equalizing particular provincial services, and it is possible that the national interest might on occasion justify such a step. Provided provinces are not thereby tempted to forego or starve other needed services, we can see no serious objection to small grants-in-aid for particular provincial services, and especially for specialized health services where scientific standards for measuring efficiency are relatively easy to apply. But it should be noted that such grants-in-aid would to some extent be an alternative to the adjustment grants recommended in the commission's financial plan, and to increases in them."

Mr. MacNICOL: I wonder, Mr. Chairman, if the Hon. Mr. Garson would mind an interruption. This is the Reconstruction and Rehabilitation Committee, and while everything you have so far said, Mr. Garson is of very great importance, social security and social welfare primarily are not our job; primarily, the job of this committee is to survey projects that will provide jobs. I would like to say that last night I very carefully read over your brief and I

do not find any reference to jobs in it for this committee to consider until we reach page 25, but from there on I find a great deal of meat, sections that we could discuss with you to advantage. For instance, I would like to have an elaboration on the Manitoba electrification plan, which I think is most important; but I submit, Mr. Chairman, that we will never get that far to-day unless we find some way of passing over this social security material which does not pertain to the work of this committee. I am sure that will be very much appreciated by the committee on Social Security, but this is another committee, and I suggest to move ahead to 24.

The CHAIRMAN: May I just take a moment to tell you that I have read the brief and I think probably what Premier Garson has in mind is to set out the financial position of his province and what that will be in respect to the post-war period when it is reached, so that this committee can judge the better what the position of the province will be and what the province will be able to do in view of its financial resources which will be available at that time. Every committee has to meet things that rise on occasion which perhaps do not come strictly within the purview of its reference.

The WITNESS: Mr. Chairman, might I just say a word with regard to the objection taken by the hon. gentleman—

Mr. MacNICOL: No, it was not an objection.

The CHAIRMAN: It is not an objection but rather an observation.

The WITNESS: Then, the observation made by the hon. gentleman; I confess that in some respects I am less in agreement with his observation, and I am very glad that this point has been raised because it enables me to introduce some clarification of our position which I did not want to bother the committee with if the matter had not been raised. Our point is this: this post-war program relates both to social security and development works which fall within the provincial jurisdiction. These I suggest will be quite a large part of the total post-war program and they can, under our constitution as it is at present set up, only be provided by the provinces. If they are not provided by the provinces they will not be provided at all and we shall not have a post-war program.

Some Hon. MEMBER: Hear, hear.

The WITNESS: Therefore it seems to us in Manitoba to be of most tremendous importance to examine in a practical way the practical business aspects of the post-war program, as to how we are going to finance the major share of it. My only reason for dealing with social security before a reconstruction committee is this, that I wanted to bring the financial discussion before you in the most practical way possible. There is no developmental program, there has been no developmental program brought out by anybody by governments, by committees or by anybody else. The reason I selected the social security angle was that we could take its three proposed elements, health insurance, social security and education—we know what the proposed costs of them are going to be; and I can relate those costs to the provincial budget and I can say, Mr. Chairman, ladies and gentlemen, here is a measure of our difficulty indicated arithmetically. It is all very well to discuss matters of this sort in language, but if you are talking about a financial matter to my mind it carries a great deal more conviction if you can say that such and such a scheme is going to cost so many millions of dollars; and if you can indicate that as a province we are going to have a revenue of so many millions of dollars and that so many other millions of dollars are going to be required to carry out these social security projects or undertakings and that that leaves us so much short of what we require. In my introductory remarks I said that we would examine social security, and that the same type of financial difficulties would arise with

respect to the developmental part of the program. The only reason I am not discussing the difficulties advanced in connection with the developmental part of the program is that as yet there is no developmental program to discuss, and therefore no financial difficulties of a developmental program to discuss. That is my only reason for interjecting this social security angle for discussion. The point is, I think, that careful examination of the brief will show that every observation concerning the financial difficulties pertaining to social security apply with almost exact analogy to the question of developmental projects.

Hon. Mr. MACKENZIE: Mr. Chairman, may I have the opportunity of saying a few words: I say without any hesitation at all that this is a most valuable presentation and I regret that we did not have a joint meeting of the two committees to hear it, because the problems with which these two committees are dealing are very closely related, and in this brief Mr. Garson deals with an essentially basic phase of the whole problem. The aspects of social security with which he deals here are of direct importance to the whole major problem, and what we may decide to do with respect to that part of it will determine to a large extent the manner in which we may be able to implement our policy of social security. I think that it would save a good deal of time and that we should have this brief on the record.

Mr. HILL: Apparently the first 25 pages of the brief relate to social security; that is a matter which, as Mr. MacNicol pointed out, is the direct concern of another committee. I think it is the duty of this committee not to consider so much a plan for expenditures relating to social security after the war, but rather the matter of employment, with which it is more immediately concerned. In that connection I would state that in my opinion the last ten pages of this brief are most interesting, and there are some things there on which I would like to ask Mr. Garson some questions. There are some 25 proposals all of which quite definitely come within the scope of our reference. Now then, Mr. Garson, as far as this committee is concerned, I think they will recommend to the dominion of Canada practically everything you have indicated there by way of a proposal; and I may add, that there are a great many other articles that you have not recommended for consideration after the war in your province which will be undertaken by the dominion as a whole. At the same time, these things which you are bringing to our attention I see are for the most part projects which will be undertaken by the province as their own responsibility; at least, I think such would be the case, because I notice that you have the responsibility of taking over unemployment insurance. And now, we would like to go on to that point in your brief and have an opportunity of questioning you on it. We are not at liberty to question you on the social security angle as we are not set up for that purpose; and, therefore, we will admit your financial responsibilities with reference to social security; but I think we should have an opportunity of discussing with you these 25 or 30 projects which are indicated in the latter part of your brief. I think that is our responsibility as a reconstruction committee.

The CHAIRMAN: Mr. Premier, before you go on may I just say a word: I read this brief late last night and I had somewhat similar opinions as to those which have been voiced here; but, as our witness has pointed out, this brief is the basis for a discussion of the financial position of the province of Manitoba at the post-war period. I was going to suggest this further; you will notice that we have here the chairman of the Senate committee on reconstruction and social security, the hon. Senator Lambert; and I called up last night after reading part of this brief Dr. Cyrus Macmillan who is Chairman of the committee on Social Security and I suggested that he might meet with us, and only other duties incidental to his position as parliamentary assistant have

kept him from being with us this morning. I was going to suggest that this whole brief might readily be put on the records of the social security committee; provided, of course, that the members of that committee wish it.

Mr. MacNICOL: We could put it on our record too.

Hon. Mr. MACKENZIE: Yes, have it on the records of both committees.

The CHAIRMAN: Mr. Garson, you might like to accept the suggestion which has just been made, that your brief might be put on the record without actually being read.

The WITNESS: Quite.

The CHAIRMAN: If we do that, it would provide a better opportunity for questioning. I would suggest that we should jump over now to page 12, to the paragraph with the special heading at the bottom of the page. You will notice that on the page immediately following there are some points raised which possibly Mr. Garson would want to discuss before this committee.

Mr. MARTIN: There is just one point which I thought should be brought up, that is that the division between the committee on Social Security and this committee is not necessarily so very serious.

Hon. Mr. MACKENZIE: No.

Mr. MARTIN: The difficulty however is that reconstruction, the providing of jobs, would not necessarily involve social security in many of its aspects.

The CHAIRMAN: The purpose of raising the point which Mr. MacNicol did was with a view to saving time so that there would be ample opportunity for questions.

Mr. HILL: Discussing it from the financial standpoint, it would take up too much time.

Mr. MacNICOL: My suggestion was that we go over to page 24 (have the other material put on the record as read) and then we might ask Mr. Garson about some of his recommendations on the last five pages of his brief; they are matters which relate directly to the work of this committee.

The WITNESS: I think perhaps I might be able to clarify the situation a little if I were to point this out, that only two of the matters listed in the latter pages have been brought to a point where questioning would elicit any very useful information for the committee; and even that does not apply to one of them. One of these items is the inquiry being conducted by the University of Minnesota and the University of Manitoba as to the possible economic consequences of the various post-war settlements; and the other one is our electrification committee report. Now, the electrification committee report was prepared by Professor Schmidt, of the University of Minnesota whose specialty is public utilities; Mr. Sanger, chief engineer of the city of Winnipeg Hydro Commission; and Mr. Caton, chief engineer of the Winnipeg Electric Company; and associated with them the commissioner of the provincial hydro. So I do not think any answers I could give the committee upon it would add very much to its value; but we would be very happy to provide the committee with copies of this report which has been commented on very favourably by various witnesses before your committee. While I am very glad to answer any questions, one of the reasons that most of this material was put into the brief with considerable detail was to make our presentation as complete as possible, and I do not think there is very much which I could add at the moment. The projects which you see listed on the latter pages of the brief are those upon which we have set up the committees, but upon which very little work has been done; at least, to the point of their being able to provide me with anything tangible to bring before this committee. But we thought this question of whether the financial problem of post-war was being solved on the one

hand by the transference of our provincial responsibilities to the dominion, or whether it is to be solved by the dominion giving adjustment grants to the provinces, is of the first order of importance; for this reason, that if it is to be solved by the former alternative then the scope of our provincial inquiry is considerably limited and we can save a lot of the time of engineers and economists and other experts if we know which of these two alternatives would apply. As I say, at the moment I do not think I could add a great deal of enlightenment with regard to the questions which you may wish to ask me on the latter part of this brief. And, in addition to that, in respect to any development that is undertaken I think this financial question is of crucial importance to the whole thing.

Hon. Mr. MACKENZIE: Hear, hear.

Mr. QUELCH: I think Mr. Garson raised a very important point in his brief, that of the financial position of the provinces; what it is now and what it is going to be after the war. We seem again to be running into the same difficulties with this committee that we are always up against, the same kind of trouble we had last year; and that is we seem to seek to avoid on every possible occasion dealing with the financial aspect of these problems. Do you realize that the great depression following the last war was brought about not because we did not know about desirable projects so much as because we did not know where the money was to come from with which to carry out those projects. That depression happened because of the lack of financial assistance. I do not know how any province could possibly say what they can or cannot do after the war unless they know what money is going to be available with which to handle these projects. And now, you are saying in this brief what your position will be on the financial side; and I think it is very necessary that this committee should know the attitude of every province regarding financial questions. To my mind this brief is in all probability the most important brief that has yet been submitted to this committee since it was set up. I hope very greatly that Mr. Garson will be permitted to continue with his brief in its entirety. In so far as the projects themselves are concerned, I should imagine that if we want to deal with specific projects the men we should have here are the engineers, and men qualified to speak on every phase of the project. You cannot expect the premier of any province to be familiar with all the aspects of the case. I think Premier Garson is to be highly congratulated upon the brief he has submitted to the committee.

The CHAIRMAN: I do not desire to stop any discussion, but I must point out that what was desired by the original interjection was to save time so that we might have a period of questioning, and the more we discuss this matter the less time we are going to have for questioning. Therefore, I suggest that we leave to the good judgment of Premier Garson to suggest what parts of his brief may be taken as read so long as he understands that the material will be put on the record, and we will do the best we can with regard to questioning.

The WITNESS: I was at the top of page 10 of our brief, under the heading of "Estimated Costs to Manitoba of Implementing Health Insurance, Social Security and Educational Proposals".

Upon the basis of the present allocation of governmental responsibilities and taxing powers let us endeavour to make an estimate of the approximate cost to Manitoba of health insurance, social security and educational reform proposals now being considered as possible items of a post-war program. Let us first consider the cost to Manitoba of the health insurance proposal made to the House of Commons special committee on Social Security. On the basis of the population of Canada in 1938, it is estimated that the health insurance scheme would cost a total of about \$256 million. Allowing for contributions

by beneficiaries and employers and for the present cost to the provinces of grants to hospitals and payments on account of indigents, which costs are to be absorbed into the scheme, the net additional cost to the public treasuries (dominion and provincial) would amount to over \$116 million. On a per capita basis, the net cost to the province of Manitoba before the dominion grant would be about \$7.9 million. Various bases upon which the operational costs might be divided between the dominion and the provinces are given as illustrations. Using the estimated population figures of Manitoba for 1938 as a basis of calculation, which is the only basis which can be used with information now available, the following results are obtained. If the dominion were to pay one-sixth of the operational cost the additional cost of the scheme to Manitoba would be about \$5.1 million; if the dominion were to pay one-quarter the additional cost would be about \$3.7 million; if the dominion were to pay one-third the cost to Manitoba would be about \$2.4 million; and if the dominion paid four-ninths, it would amount to about \$500,000 for Manitoba.

Next, let us examine the estimated cost to Manitoba of putting into effect the proposals in the Marsh Report? As you know, this report considers all phases of social security—unemployment insurance and assistance, health insurance, workmen's compensation, old age pensions, children's allowances, and the like. Some of them are already in operation; some are not. In section 22, pp. 116-119 of the report, Dr. Marsh deals with financial considerations. Dr. Marsh estimates the total cost of social security in Canada "as approaching a billion dollar program". But "on a social insurance basis, total disbursements may increase very greatly without implying increases in taxation which are at all comparable in amount". Considering the whole range of the program "the net result might well be (like the Beveridge plan) that half of the revenues should be anticipated from tax sources". The remainder would be derived from contributions of beneficiaries and others. This would mean that an amount of the order of \$500 million would have to be provided out of public funds, dominion and provincial. Let us assume that additional costs to dominion and provinces would be of the order of \$400 million. The crucial question as far as Manitoba is concerned is how this amount is to be divided between the dominion and the provinces. If the provinces were asked to assume one-half the additional obligation—\$200 million—the cost to the province of Manitoba on the basis of population would be about \$13 million. If the dominion were to assume 75 per cent of this cost (the basis upon which contributions are made to old age pensions) Manitoba's share would be about \$6.3 million, inclusive of health insurance costs. Exclusive of health insurance costs, Manitoba's share upon the basis of the dominion assuming 75 per cent of the cost would be approximately \$4 million.

Recently a report has been issued by the survey committee of the Canada and Newfoundland Education Association. In this report it is estimated that just under \$147 million was spent on education throughout the dominion in the session 1941-1942. It is proposed by the committee that the annual expenditure be increased by \$144 million. Education in Canada, as you know, is the responsibility of the provinces. If Manitoba were to assume a share of this increased expenditure in proportion to her population it would mean a budgetary increase of over \$9 million. This increase is equal to almost four times the Manitoba Government's present expenditure on education; and is equal to over 80 per cent of Manitoba's total provincial expenditures for all purposes of government except public debt charges. If the additional \$144 million were allocated on the basis of average daily attendance in provincially-owned schools (1940) Manitoba's share would be \$8.8 million. In the Sirois Report it was noted (without a finding) that already the cry arises on all sides that the taxation of real estate is too high. To the extent that this is so it would be impossible to pass these extra costs to the municipalities as at present

organized. In Manitoba, the cost to the provincial budget in 1944 for education the taxation of real estate is too high. To the extent that this is so, it would be \$2,558,000.

The estimated additional costs to Manitoba as a result of the implementation of these proposals would be:—

|   |                 |
|---|-----------------|
| Health Insurance (assuming the dominion government to pay one-third of the operational cost).   | \$ 2.4 m.       |
| Social Security as in the Marsh Report but not including health insurance (assuming the dominion government to pay 75 per cent of the cost) ..... | \$ 4.0 m.       |
| Education (assuming the additional cost to be allocated on the basis of average daily attendance in provincially-owned schools) .....             | \$ 8.8 m.       |
|   | <hr/> \$15.2 m. |

#### DEFICIT BUDGETING BY PROVINCES IMPOSSIBLE UPON BASIS OF PRESENT DOMINION-PROVINCIAL RELATIONS

In the 1944 budget (estimates) the total cost to Manitoba for education and public welfare (excluding relief) is \$6.1 million. The above proposal, on the basis of the figures used, would increase the cost of those social service and educational items by \$15.2 million, thereby making the estimated total post-war cost of these items more than \$21 million. This compares with an estimated expenditure of \$17.2 million for all purposes of government, including debt charges for the year ending April 30th, 1944.

There has been a good deal of discussion recently on the necessity of government spending for investment purposes after the war in order to maintain a high level of production and employment, that is spending on developmental projects of the kind you are considering in this committee.

The most recent that I have seen is contained in the submission by Dr. James to the special committee of the Senate on Economic Re-establishment and Social Security on March 31st, 1943. With reference to the maintenance of full employment he said at that time that "the task of maintaining full employment is pretty closely associated with the task of maintaining a gross capital formation in Canada of one-fifth of the national income". Dr. James thinks the national income ought to be maintained at \$7.5 billion after the war. This would involve gross investment of \$1.5 billion and as Canada has never succeeded in maintaining such a figure continuously for a ten-year period, Dr. James states that "the Dominion Government is called upon to act in a marginal capacity, to stand ready if private investment falls below the necessary minimum level—to stand ready with dollars of public investment...to bring it to that figure". In his opinion, after the first two post-war years are past, it is "quite probable that we will have to spend two or three hundred million dollars on an average for five or six years to take up the slack and maintain full employment". Then comes this significant statement (p. 25). "That is going to cost money, and it is quite obvious in the circumstances that public investment would have to be financed by borrowing and not by taxation". Later in his submission (p. 29) Dr. James explains the implications of this proposal as follows: "...the recognition of that policy of public investment as a marginal factor to take up the slack of private investment at any period implies the necessity of a complete change in our budget philosophy. We should still have an annual budget for probable revenues and expenditures; but so far as public investment expenditures are concerned for the construction of all kinds of pro-

jects, it would obviously be necessary to have a budget which extends over a period of years. Mr. Churchill two Sundays ago suggested four years as the period for a plan. That may be perfectly right, politically speaking. But economically I prefer a period of seven or ten years. It may also be true... that the adoption of that policy will mean a slight but continuous increase in the total public debt over the next hundred years."

By reason of their constitutional responsibility for the carrying out of a large part of the national post-war program the provinces would be charged with the task of providing for a substantial portion of such government investment. Dr. James' proposal, therefore, would mean that long-term deficit budgeting would have to be applied in a provincial capital budget. This capital budget would have to be carried alongside a provincial current account budget which, with the heavy social services above referred to, would be perennially and heavily in the red unless the provincial revenues presently in sight are substantially increased.

This has everything to do with developmental expenditures because this work has to be financed by borrowing, and if we cannot borrow the money to carry out these developmental projects, they will not be done.

It is difficult to see how under such a condition investors would lend Manitoba and other provinces the money which they would require to borrow to finance a ten-year deficit budget on capital account, in the face of its being unable by a wide margin to meet its expenditures on current account. If Canadian governments are going to supplement private investment in order to maintain full employment, a new dominion-provincial relationship will have to be reached which will provide the provinces with a provincial credit adequate to cope with their proposed post-war responsibilities.

Moreover, under this deficit budgeting proposal, the debt of the province would be increased. Thus, in addition to increases in expenditures for education and social service, we would have to provide for mounting debt charges. It should be noted, too, that whether capital outlay for the purpose of maintaining full employment were financed by the dominion or by the province, the net result would be rising maintenance and operational costs in connection with roads, hospitals and other institutions which under the present constitutional division of powers would fall upon the provinces.

#### COMPARISON OF ESTIMATED POST-WAR REVENUES WITH ESTIMATED POST-WAR EXPENDITURES REVEALS THE UTTER INADEQUACY OF PROVINCIAL TAXING POWERS TO SUPPORT THE SHARE OF THE POST-WAR PROGRAM WHICH IS PROVINCES' CONSTITUTIONAL RESPONSIBILITY.

In order to demonstrate to the committee the utter inadequacy of our revenues to discharge these obligations, may I compare these costs with our revenues in the base year of the dominion-provincial taxation agreement—that is, the fiscal year which ended April 30, 1941, 18 months after the war had started when war expenditure had already had a buoyant effect upon provincial revenues. In consequence this was a year in which there was reasonably full employment. Domestic and foreign markets for Manitoba's products had improved materially. Manitoba's income, as shown in the statistical summary of the Bank of Canada for February-March 1941, was \$284.4 million. This might be compared with the low of 1933 of \$170.9 million.

In this base year ended April 30, 1941, Manitoba's total revenues on current account were \$17.3 million—the lowest in Canada outside the maritime provinces. Compare this total revenue of \$17.3 million obtained under reasonably good economic conditions with a possible increase in expenditures for health insurance, education and social security of \$15 million, to say noth-

ing of the increases in expenditure which might follow any substantial government investment for the maintenance of employment.

Dr. James envisages a national income of \$7.5 billion per annum in the post-war period. The national income in the calendar year in 1940 was \$4.6 billion. Of this national income Manitoba received a little over 6 per cent, or \$284.4 million. If Manitoba were to share in a national income of \$7.5 billion in the same proportion (and this would not necessarily be true), our income would be \$464 million. With almost the highest rates of corporation and income taxation of any Canadian province, we obtained only a little over \$5 million from those sources in the fiscal year ended April 30, 1941. If in the post-war years we can assume that the incomes of the people of Manitoba will approximate \$464 million, we might, at the same rates of taxation, obtain a revenue from these sources of about \$8 million. On the same assumption, our other principal sources of tax revenue which in the base year yielded \$7.1 million might be expected to yield an additional revenue of about \$4.5 million, or a total of \$11.6 million. The additional revenue of \$4.5 million is made up of the following estimated increases: Gasoline Tax \$1.7 million, Succession Duties \$.4 million, Amusement Tax, \$.09 million, Motor Vehicle Licences \$1.0 million and Liquor Profits \$1.3 million. Therefore, the estimated overall revenue increase from all of these taxes including corporation and income taxes would be about \$7.5 million. This would bring their yield up to \$19.6 million. This estimate of course is only approximate, but we think it indicates the maximum return which we might expect to realize from these sources in the post-war years. The figure of \$19.6 million compares with a revenue of \$17.3 million from all revenue sources in the favourable base year 1941.

Lest it be thought that we had in this base year unexploited tax capacity in Manitoba let me point out that our corporation income tax rates in that year exceeded those of both Ontario and Quebec except in the lower income brackets. Our corporation tax on taxable incomes of \$5,000 was lower, but it was twice as high on corporate incomes of \$25,000, \$100,000 and \$250,000, as it was in those two provinces. In these higher brackets our tax also exceeded those of Alberta and Saskatchewan.

On personal incomes, our tax in the \$2,000, \$5,000 and \$10,000 net taxable income brackets was the highest in Canada. I state these facts to show that the revenue which we did obtain in the base year was obtained only as a result of exceedingly heavy rates of taxation. Moreover after the expiration of the dominion-provincial taxation agreement the position of the provinces with respect to the taxation of corporation and incomes will be very different to what it was in 1941. When the taxation agreement expires the provinces will have to re-impose their provincial corporation and income rates over and above dominion rates which will be very much higher than they were at the time that the taxation agreement was signed. The dominion will be handing back to the provinces their fields of direct taxation of corporations and incomes subject to the dominion government's continuing a maximum exploitation of these same fields in order to support the dominion government's own very heavy post-war expenditures. The provinces will have to take the onus of reimposing the provincial tax rates on top of federal rates that provincial tax payers will consider are quite high enough for them to pay without having to pay new provincial rates as well. Under these circumstances it will be extremely difficult politically for the province to secure anything like enough revenues from these fields of direct taxation.

Moreover, in the submission to which I have referred, Dr. James stated that "it will be necessary not only to reduce taxes after the war. . . but also to change the pattern of taxation." If, as a part of a national policy to encourage

private investment, the rate of provincial income taxation would have to be decreased in these fields, the province would for that additional reason have less tax revenue from these sources.

All of these considerations point to the direct taxation of corporations and incomes as being an inadequate source of tax revenue to the provinces after the war. Yet direct taxation is the only field which the provinces have under the Canadian constitution. If direct taxation is inadequate where would the province find the additional money? About the only alternative would be a retail sales tax. We do not now impose such a tax. As a source of provincial revenue it is questionable on constitutional grounds. But apart from that, as Professor Alvin Hensen, the great American economist—and I have never seen it put better—puts it, “. . . the cumulative effect of growing social services financed largely by consumption taxes, is to place an increasing drag upon economic expansion and full employment of our resources.” The enlargement of social benefits publicly financed is, in effect, a transference of income from the more fortunate to the less fortunate members of the community. For that purpose the best source by long odds is deemed to be taxation of income—corporate and personal. And income taxes best perform this function of transference when imposed by the federal government.

MR. MARTIN: You overlooked the matter of succession duties.

THE WITNESS: Yes, I did, for the reason that succession duties are not covered by the taxation agreement: but I agree that the same remark as you correctly imply is applicable to succession duties also.

#### SEVEN REASONS WHY DOMINION CONDITIONAL GRANTS-IN-AID SHOULD BE REJECTED AS A DEVICE TO ASSIST PROVINCES IN THEIR POST-WAR FINANCES

The inadequacy of our estimated increases in tax revenues to meet our estimated increases in the cost of social services and education alone (to say nothing of increased debt charges for developmental borrowings, increased costs of maintenance of roads and other public works, etc.) raises the question as to how the province is to finance the cost of its share of the national post-war plan. This involves a brief examination of the present dominion subsidy and will lead us to suggest how this may be modified to meet provincial post-war needs.

The British North America Act, 1867, established a system of subsidies payable by the dominion to the provinces on a per capita basis. These subsidies at the outset were intended to meet the fiscal need of each province. But as Canada developed, the cost of discharging provincial government functions greatly increased. At the same time there were great relative changes in the taxable incomes of the people of the various provinces. Taxable incomes rose more rapidly in certain provinces than in others. This became apparent in an increasing gap in the per capita incomes of the people of the various provinces. As a consequence, the payment by the dominion of a fixed grant to the provinces per head of population failed to meet the provinces' developing fiscal needs. This failure was more pronounced in some provinces than in others. The dominion government then began to experiment with the conditional subsidy. Conditional subsidies, however, have very serious defects. As long as the conditional subsidies granted were small in amount their disadvantages were not apparent. But when they became a means of financing a large proportion of provincial functions, they broke down.

1. The dominion found that it faced two alternatives—both unsatisfactory. It could impose rigid and detailed conditions upon which the subsidies would be granted, together with such minute inspection and regulation as to constitute an encroachment on provincial autonomy. The imposition of rigid conditions has led in the past to bitter differences between the provinces and the dominion.

Moreover the conditions were, in many cases, ineffective since the withdrawal of the dominion grants, because of the conditions not being fulfilled, was not politically feasible.

2. If the dominion adopts the alternative of imposing conditions which are very general in nature, the consequences are frequently waste of public money, incapacity to deal with problems on a national scale and failure to assure national standards of social services.

3. In the provision of grants-in-aid to municipalities for relief, an additional difficulty lay in the fact that the dominion had to deal through the provinces and to rely on advance agreements and post-audits of expenditures. These were both sources of friction. The principal difficulties were the variability of the financial burden from time to time and from municipality to municipality, the lack of objective standards for estimating need and efficiency, and political abuses, resulting from this lack of standards, with regard to the size and allocation of grants. In addition it continually prevented concentration of responsibility for remedial policies. Differences of opinion as to policy often led to lack of co-operation between the provinces and the Dominion.

4. The monies which the provinces themselves had to provide and spend in order to entitle them to receive the conditional subsidy from the dominion government unduly increased the financial burden of the less well-to-do provinces.

5. After the province had taken on a responsibility upon the basis of paying, say, half of its cost, the dominion, as a result of a change in its policy, by withdrawing could leave the province with the dilemma of paying the whole cost or discontinuing the policy.

6. The conditional subsidy may be useful in some cases where small amounts are involved, but even then it demands objective standards and the possibility of detached professional administration. Unskilfully operated, or under adverse circumstances it works an encroachment upon provincial autonomy. In a unitary state such as Great Britain the payment of conditional grants by the national government to the municipal governments does not involve a question of encroachment upon local autonomy because municipal governments have no autonomy except that delegated to them by the national authority. Under a federal system, such as we have in Canada, the provinces possess governmental powers which, within their own proper sphere, are as sovereign as those of the federal government. Therefore, the experience in unitary states of conditional grants made by the national government to municipal governments is irrelevant to the discussion of Canadian federal conditional grants to the provinces, which in their practical operation may, and often do, involve provincial autonomy and the effect upon it of the conditions imposed by the dominion.

7. Perhaps the most objectionable feature of federal conditional grant, however, is that when it is made upon the usual condition that the province must match it with a provincial expenditure of equal or proportionate size, the province with the greatest financial resources to begin with qualifies for the largest share of the federal conditional grants fund. Upon the principle of "For he that hath, unto him shall be given" the Dominion Government with impartial uniformity matches the dime of the province which needs help very badly, and the dollar of the province which needs little help or perhaps none at all. The pronounced disparity in taxable resources which existed between the provinces of Canada before the war is being greatly increased by the economic consequences of the war itself. A policy which still further aggravates this disparity in the post-war period is harmful to Canadian unity, and we think wholly reprehensible.

## CONDITIONAL GRANTS-IN-AID OBJECTIONABLE TO MUNICIPALITIES

Much of what I have said with respect to the problems of provincial finance applies also to the municipalities. In the interim report of the British Columbia Post War Rehabilitation Council, the members of the council have this to say (pp. 160, 161):—

“As to municipalities particularly, (though it is applicable to the province) only financial ruin can face them ultimately if they are encouraged or expected to plunge into heavy debt for expensive improvements, merely to provide work. Nor should they be competing with each other, with the dominion and provincial governments, and with industries, on the investment market and thereby be compelled to pay higher interest than is warranted for such capital expenditures as are necessary.”

Many of our own municipalities have expressed the view that unless the sources of municipal revenues are enlarged, or the incomes of municipal taxpayers increased, they cannot increase their contributions to social services. To some extent these municipalities have re-established their financial position after the distress of the 1930's. But even so, they do not again intend to assume financial burdens by borrowing at high rates of interest nor do they intend to become committed beyond their means in any reconstruction program for the purpose of reducing the financial burdens of business or senior governments. In their view the provision of full employment, and adequate standards of education and social services is a national problem and should be financed by the federal government. There is an additional point in connection with the planning of municipal projects which should be noted. Our municipalities have represented to us that it is impossible to obtain the competent engineers necessary in planning local post-war projects. It will be obligatory on the province to find the engineers if local post-war projects are to be planned.

## SUMMARY

May I now sum up these remarks.

Your first and second questions are: “What they (i.e. the provinces) expect will be their provincial post-war problems,” and “What solution of these problems is proposed by the province”. Manitoba's two main post-war problems, like those of Canada, will be to provide employment and social security for its citizens. Canada's and Manitoba's problems in this respect can only be solved by a national program. In the drawing up of such a national program we offer the fullest measure of co-operation. The proposals which I shall now make on behalf of Manitoba are put forward for inclusion as part of such a national program.

It is clear that under the present division of governmental responsibilities as between the provincial and dominion governments, a substantial part of any such national program falls within provincial jurisdiction and can only be performed by the provinces. If the provinces are unable, for financial or other reasons, to discharge their share of such a national program that share will not be discharged at all and the national program will to that extent fail of accomplishment.

When the present dominion-provincial taxation agreement expires the provinces will find themselves with no greater taxing powers than they had before the war but with greatly increased provincial responsibilities for their share of the national post-war program. For health insurance, for the Marsh social security plan and for the Canada and Newfoundland Education Association proposal alone, the estimated additional cost for the Manitoba budget, based upon an admittedly arbitrary division of costs as between the dominion and the

provinces, would be \$15.2 million. As I have pointed out already our total estimated increase on annual tax revenue resulting from the holding of the national income at  $7\frac{1}{2}$  billion dollars per year will be  $7\frac{1}{2}$  million dollars. This will leave a deficit of approximately 7 million dollars per annum in the provincial current budget without taking into account increased expenditure for purposes other than for social security, health and education.

It is clear, therefore, that if the provinces are left with their present constitutional responsibilities (1) Manitoba's present financial resources will be deficient by not less than seven million dollars per year to pay for its share of a national post-war program, and (2) it is quite impossible to accurately estimate the full amount of such deficiency until the dominion government formulates a national program in its final form. Replying, therefore, to your third question "What federal assistance may be desired", we would answer that the federal assistance required to enable Manitoba to carry out its share of a national post-war program will be a large—probably not less than 7 million dollars per annum—sum of money, the exact amount of which cannot be stated until the cost of the whole program and the extent of Manitoba's share thereof are known.

We desire to emphasize at this point that in our judgment it is of transcendent importance that the methods by which all of the provinces of Canada are to be enabled to pay for the share of Canada's post-war program which our constitution says shall be discharged by them, and by them alone, should be determined after a most careful consideration of the whole question of dominion-provincial relations. The decision reached on this most important question may well determine whether Canada's post-war program is a success or a failure. It is, we think, impossible to exaggerate the importance to the operation of a reconstruction plan in a federal state like Canada of establishing a proper balance between each province and the other provinces and the dominion as a whole.

The Canadian constitution has determined what the provincial share in post-war reconstruction shall be. The Canadian constitution has determined what the provincial financial resources shall be. The provincial financial resources so determined will not support the provincial share of the post-war program so determined. If we are sincere in our desire for an effective post-war program, we must either increase the province's financial resources by federal adjustment grants, or we must transfer from the provinces to the dominion a large part of the provincial share of the program.

If we do not do either or some of both of these things we won't have an adequate post-war plan in Canada. And the sooner we know which alternative we are going to adopt, the sooner the provinces and municipalities can plan intelligently. As a step toward the solution of this problem we propose that preparations be made at once for a meeting of dominion and provincial representatives to search for ways and means of achieving the necessary adjustments to make it possible for each jurisdiction to adequately fulfil its increased post-war responsibilities.

The Manitoba government wished first of all to place itself in a position to say intelligently what sort of plan would be in the interests of the people of Manitoba. The government wished to be in a position to advise those statesmen in Canada who will be responsible for federal post-war policy and who will represent Canada in the formulation of peace terms, as to what terms could be considered advantageous to Manitoba. We are not such selfish optimists as to think that the peace terms and federal post-war policy are going to be formulated for Manitoba's special benefit. But it may well be that many terms which would be advantageous to Manitobans would be of equal advantage to other interests concerned. Accordingly the governor of the State of Minnesota and the Premier of Manitoba requested the University of Minne-

sota and the University of Manitoba to undertake a joint study of the effects of alternative post-war settlements on the economies of the prairie provinces of Canada and the central northwest region of the United States. The preliminary study to this enquiry of this kind is now completed and in process of publication.

In June, 1943, the Manitoba Electrification Enquiry Commission was set up by the Manitoba Government. This Commission studied rural electrification in Manitoba during the course of last summer and in December its report was presented to the government. Its report recommending a farm electrification program has been widely circulated and is probably known to the members of this committee.

We have set up a committee of Deputy Ministers. In addition there are special committees which have been formed to study particular problems. The main duty of the committee of Deputy Ministers is to coordinate all the work which is being done or may be done in the future and to project further studies as they may seem desirable. General directions to these committees are as follows:—

- (1) To study the changes which have occurred in industry and agriculture under the influence of war. This study would be undertaken to determine as nearly as possible the magnitude of the shifts in man-power which will be necessary when the special demands of wartime for the products of industry and agriculture have disappeared. This will involve a study of the manpower which has been drawn into industry, the numbers of men and women from the armed services who may be expected to return to Manitoba and the number of women who may be expected to return to their homes.
- (2) To seek out projects (particularly those likely to afford substantial amounts of employment) which, while in themselves desirable, would be unlikely to prove sufficiently profitable to ensure their undertaking by private enterprise. In this class would come the protection of our destructible resources such as water, soil, and forest, by an orderly development and conservation, and the construction of roads, recreational areas and tourist attractions for the better utilization of our natural advantages. In addition, necessary and deferred public buildings would be extremely suitable media for the implementation of post-war policy.
- (3) To set out and appraise relevant information as to projects which might be advantageously undertaken by private enterprise.
- (4) To seek out projects which might be undertaken at public expense but which would be directed primarily toward increasing available opportunities for private enterprise. In this category would fall geological surveys (which would provide, to take only one example of their usefulness, a dependable basis from which to conduct prospecting operations); drainage to make certain lands suitable for agriculture; research into possible new uses for our products; agricultural and other natural products and for waste; and the construction of roads.

SPECIFIC STUDIES WHICH WILL BE MADE AND SPECIFIC PROJECTS WHICH WILL  
BE INVESTIGATED

1. Construction of necessary hospitals and other public institutions and buildings.
2. Resettlement and land utilization policies for the post-war era.
3. Increased health education, establishment and dissemination of proper nutrition standards.

4. Increased vocational training.
5. Collaboration with dominion government in working out of national social security and health insurance plans.
6. A study of the probable nature and extent of Manitoba's post-war employment problem of men and women under the following heads:—
  - (a) Statistics.
  - (b) The employment problem of the period of transition from war to peace.
  - (c) The long term employment problem of the post-war period following the transition from war to peace.
7. A study in collaboration with the employers of Manitoba of the factors necessary to achieve full employment in private enterprise after the war; and of the means by which those not employed by private enterprise might be employed.
8. Preparation of a plan of needed and useful road construction projects.
9. Preparation in collaboration with Manitoba municipalities of a program of municipal public works.
10. Regional projects for development of resources in areas of unbalanced development.
11. A study of possibility of attracting industries to use the power and warrant the development of presently undeveloped power sites such as White Mud Falls and Dauphin River.
12. Projects to provide necessary water conservation in dry areas requiring it.
13. Surveys and mapping needed for post-war development.
14. Fur area development projects.
15. Tree planting and forestry resources development to achieve maximum perpetual annual yield of forest products.
16. The encouragement of prospecting and mining development projects in relation to new employment and the extension of industrial opportunities.
17. Development of conservation of fisheries to produce maximum perpetual annual return.
18. Development, conservation and regulation of game resources aimed toward maximum perpetual annual production and promotion of tourist industry in Manitoba.
19. Projects to prevent periodically recurring flood damage in certain areas now subject thereto.
20. Town and community planning.
21. Housing—urban and rural.
22. Possibility of further development of processing and other secondary industries.
23. A consideration of the factors affecting the practicability of a crop insurance plan for Manitoba.
24. Study of possibility of introducing for use in Manitoba of new form of farm mortgage providing for more flexible mortgage payments.
25. Practicability of water and sewer and other community betterment projects for small urban centres.
26. Maximum nutrition standards in relation to the problem of markets for farm products; and the utilization of farm surpluses for meeting the nutritional needs of low income groups.

27. Possible new crops for the further diversification of Manitoba agriculture.
28. Establishment and development of provincial parks and recreational areas.
29. Factors contributing to the development of the tourist industry.
30. Whiteshell recreational area project.

Before concluding may I emphasize one point. We have found in the experience of our committee which has written to the municipalities asking them to make suggestions as to projects which could be developed by them (it may be that they are unduly cautious. One could hardly blame them for being cautious after coming through the period of the 1930's) that many of them have written back to us and in effect said these things "We do not like to place before our electors, our taxpayers, an implied undertaking that such and such a project can be carried out until we know what our position is going to be with regard to our being able to pay for whatever the municipal share of that project may be. If we submit it to them in their capacity as electors who are going to get a benefit from some community development we are not sure whether we can ever fulfill that implied commitment and as honest men we do not like to make a commitment and have a lot of public discussion and end up by not having it carried out, we do not like to submit the project to them in their capacity as taxpayers unless we can assure them that their municipal taxes are not going to be increased out of all reason by our having to pay the municipal share of this project; if we cannot give this assurance we are not likely to be able to develop a very strong body of public opinion in favour of that development. The tax payers have got to consider the question of taxation themselves. They have got their own personal finances to consider." That is the reason, Mr. Chairman, why it seems to us from the responses we have got from the municipalities that because of this uncertainty as to finances we are having difficulty in getting them to submit projects. The municipal officials say that they would submit projects if they only knew where they stood. They say to us, "Will you guarantee it will not cost us anything or what it will cost us, or what our position will be?" How can we in the province do so until we know where we stand ourselves. Therefore may I again reiterate as emphatically as I can that the Canadian constitution has determined what provincial share in post-war reconstruction will be. The Canadian constitution has determined what the provincial financial resources after the war will be. The provincial financial resources so determined will not support the provincial share of the post-war program so determined. If we are sincere in our desire for an effective post-war program and if we mean business we must either increase the province's financial resources by federal adjustment grants, or we must transfer from the provinces to the dominion a large part of the provincial share of the program.

If we do not do either or some or both of these things we will not have an adequate post-war program in this country. And the sooner we know which alternative we are going to adopt, the sooner the provinces and municipalities can plan intelligently.

*By Mr. Martin:*

Q. Would it not be more accurate to say that the constitution did not envisage a post-war problem in either the federal or provincial jurisdictions? —A. Quite so, quite completely accurate. The constitution was made up in 1867 in the sailing ship days when the communities of Canada were not inter-related economically. They were separate communities. We had no trans-continental railway. We had none of the conditions we have to-day. The men who drafted our constitution made a marvelously good job of it considering

the fact that for 75 years it stood up amazingly well under tremendous changes in social philosophy and economic conditions, and so forth. Their only defect was that they were not prophets. They would need good vision, indeed, in order to make a constitution in 1867 which would still be of service in all its details in the 1940's after two cataclysmic world wars.

May I just close with this remark and then subject myself to questioning? I was gratified to hear that there are two of the members of the committee who interjected that they agreed with our viewpoint as to the necessity of the financial position of the provinces being remedied. But, Mr. Chairman, I go around Ottawa and I talk to ranking civil servants and ministers and members and everybody agrees it should be remedied but nothing is ever done about it.

Hon. Mr. MACKENZIE: We tried to do it.

The WITNESS: Mr. Mackenzie is entirely right. The government tried to do it. They had a conference.

Hon. Mr. MACKENZIE: You and I were both there.

The WITNESS: That is right, we were both there. I do not wish to be impertinent or anything of that sort but, Mr. Chairman, in this post-war planning are we not in a field where time will not brook delay? If we are going to have a plan that is worth anything we have got to have it ready to go into action the minute the war is over. We have got to have our engineering detail pretty well taken care of, our legal detail, and in particular and I think more important than anything else, our financial arrangements made. With all deference it is not enough that everybody agrees that the provinces have a case. If we are going to have a post-war program we have got to take steps, take them in fact, not in theory upon which everybody is in agreement. We have got to put the provinces in a position in fact where they can discharge their share of the post-war program because, as matters now stand, if the provinces cannot discharge their share then that share, which is a very important one, will not be discharged at all.

The CHAIRMAN: Ladies and gentlemen, I think possibly the interruptions helped. I do not mean by causing the witness to eliminate the reading of some portions of his brief but because they brought out a few ideas which had not been incorporated in the brief and which will be food for thought for the members of this committee. We are open for questioning. There are several pages of importance that the premier has not read. I am assuming from the interjections previously made that most of the members here have either read or glanced through this report and therefore everybody will be in a position to ask pertinent questions.

*By Mr. MacNicol:*

Q. I wonder if the premier would be able to elaborate on what is referred to on page 24, the Manitoba Electrification Commission proposals? I have read much about it in magazines and newspapers, and so forth. I think it is a wonderful scheme and I am certain that if it is put into operation it would provide the majority of the farmers of Manitoba with a lot of jobs after the war.

The CHAIRMAN: May I just say that I wish to introduce to the committee at this point Professor Waines of the University of Manitoba who has been assistant to Premier Garson in the preparation of the brief. I want to suggest that if there is any question asked by any member of the committee it may be answered by Professor Waines if Premier Garson so desires.

Mr. GARSON: By way of reply to the hon. gentleman's question, I would be very egotistical if I thought I could paraphrase the summary of the report itself in more appropriate language of my own, so, with your permission, I will read from the summary:—

A farm electrification program in Manitoba should be operated as part of the system of the Manitoba Power Commission. Apart from the handicap of high capital expenditure, farm service merely means another type of consumer added to the commission's rural network.

I may say by way of explanation that we have in Manitoba to-day three utilities providing electric power. One is the Winnipeg Electric Company, a privately owned company providing it in the city of Winnipeg. Its competitor is the City Hydro, a municipally owned utility which is in a very prosperous and flourishing condition. They provide competition for one another and it produces an extraordinarily healthy situation. Then in the province we have the Provincial Hydro Electric System which at the present time serves for the most part towns and cities and villages but which serves only to a very small extent the individual farmers.

*By Mr. MacNicol:*

Q. Where do they get their power?—A. Where do we get our power?

Q. The Provincial Hydro?—A. The power in all cases is hydro electric power generated on the Winnipeg river and brought into the city of Winnipeg and then distributed through the province.

*By Mr. McDonald:*

Q. By your own hydro commission?—A. No. There are about five developments, two of which are owned by the city hydro and three are owned by the Winnipeg Electric or its subsidiaries. So far as the provincial hydro's power is concerned, we consented to a lease of a site known as the Seven Sisters' site—you probably have heard about it at one time or another—upon the condition that, at the expiration of the period of the lease, we can take over the site and all of the power plant and everything, from the private company for cost less depreciation. And that has been determined; we had inspectors in the place when it was built, so we know what is cost less depreciation. In consideration of that we get power. I may say one of our considerations in entering into that lease was to get a cheap supply of power. We are to get a maximum of 30,000 horsepower, all of which we do not now by any means use, and which will be pretty well adequate to take care of this farm electrification program. The complete development of this Seven Sisters' power site would involve the expenditure of a very large sum of money, somewhere of the order of \$30,000,000; and would provide horsepower, if I remember correctly, of the order of 200,000. So that if we had developed it ourselves we would have been under the necessity of turning around and trying to get money with which to cover this large capital investment by selling the surplus power in excess of the 30,000 which we required in competition with two existing companies in the city of Winnipeg.

Q. Would there be a market for that power?—A. No, there would not be. As a matter of fact, the private company that took this lease got into financial difficulty, and got its parent and guarantor company into financial difficulty, and there had to be a bond readjustment and so on. In the meanwhile, we have been getting our power for less than \$13 per horsepower per annum. The power that it has developed at that site, and which we received, cost the company something of the order of \$40 odd per horsepower. So we are really getting it at what is not only a rock-bottom price, but is a fraction of the real cost. In that respect, we are very favourably situated. But as any one who has given matters of this kind any thought will tell you, while it is good to get you power at low cost—and we are getting ours at a much lower cost than that at which the Tennessee Valley Authority in the U.S.A. supplies power to the Rural Electric Co-operative in its district—the rub comes when you start to

distribute it, because of the cost of transmission, and all the cost of transformers to reduce the voltage of your power down for use in farm houses. That is the difficulty. You have got to get your power at a very low figure if you are going to have any hope of doing it at all in a province like Manitoba where the population density is not very great. Continuing:—

The system of the Manitoba Power Commission is in a sound financial position. As soon as the war terminates, its rural network will be extended to serve the towns and villages not now using hydro-electric power.

We do not serve the whole province. There are some of the outlying sections where so far it has been difficult to justify economically going into them and some desirable extensions for which in war time we could not get materials. Continuing:—

The capital cost of this extension is estimated to be \$2,500,000. This extension will facilitate the farm electrification progress by increasing the number of points from which farm lines may be run.

The annual water power rentals, after paying water power administration expenses, are only \$37,000 in excess of the amount required for the present Manitoba Power Commission bonus.

I should say, by way of explanation there, that we charge the city hydro and the Winnipeg Electric rentals for the use of the water, which is a public resource, in the development of their power; and we have been using these rentals under our present scheme to bonus, to the extent of 50 per cent, the capital cost of the transmission lines, in the attempt to keep the cost down so as to make it possible to electrify rural communities. Those of you who live in the east must remember that our farms are farther apart than they are in Ontario and the problem of getting electricity to them is a very much greater one. Continuing:—

Based on 80 per cent saturation, 43,000 farms are potential customers in a plan of farm electrification. Of this number it is estimated that 25,000 may be connected in the first ten years at a capital cost of \$673.27 per farm, or a total of \$16,831,687.50. These figures are based on 1939 costs. After deducting the accumulated sinking fund, the net debt at the end of the first ten years will be \$14,426,800.52.

*By Mr. MacNicol:*

Q. That would mean 2,500 extensions each year for a period of ten years?

—A. Yes. Perhaps not exactly 2,500 each year. The thing is to go gradually, first of all into the more densely populated areas. That is the only way, to make sure that it is sound as we go along. The sounder it proves to be the faster we can go.

Q. You say you will be able to start in the first year after the war?

—A. I think so. As a matter of fact, the bottleneck to-day is finances. You tell us to-day, if you can, that that money will be available, and we have the engineers in the commission itself who can arrange to do the work and get going right after the war, providing you pay attention to our brief, and settle this question of provincial finance.

Q. I, for one, believe that is part of this committee's duty.—A. Yes.

Q. There is a case where an extension, by the rural electrification of 2,500 farms a year, will provide a lot of employment.—A. Yes.

Q. In building the transmission lines in order to provide power for the farms. I, for one, think we should do that.

*By Mr. Martin:*

Q. Consideration undoubtedly would have to be given, when deciding whether or not money for that project would be furnished, to the estimate you would have as to the number of men that would be given work and for what period?—A. That is all done in the report. But I might point this out. It would probably—in fact, I would say not probably but positively it would supply more manhours of work in the industrial provinces than it would in our province; because the work that is provided in the fabrication of electrical equipment, transformers, wire and all that sort of thing, would be a greater amount of manhours of work than would be required to erect the lines after the equipment had been sent out there. That is the reason why it seems to us that the only kind of intelligent planning that you can do is one national plan, because work that is done perhaps in Manitoba has a great bearing upon the amount of employment you are going to have here.

Mr. MacNICOL: Absolutely.

The WITNESS: It is only by having all of these projects from the various parts of Canada co-ordinated that you can arrive at an intelligent idea as to how much work you are going to have here, how much of it you are going to have out there and so on.

*By Mr. McKinnon (Rainy River):*

Q. Premier Garson, in the development you have now on the Winnipeg river you believe you have sufficient to carry you on for a good many years, do you not?—A. yes. I am speaking from recollection, but my recollection is that it is calculated that the power we have presently under contract, 30,000 horsepower,—we only pay for what we use; they have to reserve that much for us, though—is thought to be sufficient to carry out this rural electrification program to completion. But if it is not, we have a clause in this contract to the effect that further supplies of power can be obtained to meet our needs, the only difference being that we have to arbitrate the amount that we would pay for them.

Q. Have you given any consideration to the development of Boundary Falls in co-operation with the Ontario government?—A. We would not need to do that.

Q. You would not?—A. No; because we have the Seven Sisters' falls development. The idea was to develop the entire capacity, as there were seven drops there; to blast out the tail-race, dyke up the top, put the dam in and develop the entire capacity, there, which as I said before, was something of the order of 200,000 horsepower. But the company that did the work had a more sanguine expectation of future prospects than we did, and the market for the power did not develop. Only one or two units were put in that dam, and yet they had all the cost of putting the dam there. That is what ran the cost up to around \$40 a horsepower per annum. If they had a market for the entire power, and if they had all of their turbines in to utilize the full capacity of the river at that point, they could then cut their cost down, providing they could sell it, to something of the order of \$14.00 or \$15.50 a horsepower per annum. But we still have that undeveloped capacity there. Then we have other undeveloped sites. There is another falls close to Winnipeg, McArthur Falls, not developed, on the same river, and there are other falls: Silver Falls, Pine Falls and Mud Falls. We do not have to go to Boundary Falls. We have plenty of power.

Q. You have plenty of surplus here?—A. Yes.

Q. Then I have one more question, which has to do with the sale of bonds for the floating of this. I was wanting to get any pre-war ideas that you have.

Have you given any thought to the rate of interest on those bonds?—A. You said “pre-war.” You mean post-war?

Q. Yes, I should have said post-war.—A. Well, I think that is contained in the next section I was going to read. May I read it?

Q. Yes.—A. Very well. It reads:

It is assumed that the interest rate on capital will not exceed  $3\frac{1}{2}$  per cent.

In other words, this whole development is based upon its being made to pay if we do not have to pay more than  $3\frac{1}{2}$  per cent on our capital. Continuing:—

The sinking fund rate 2.75 per cent; the total capital fixed charges 6.25 per cent. If a bonus is paid equivalent to the interest. If a bonus is paid equivalent to the interest and sinking fund on one-half the capital, the next fixed charges may be taken as  $3\frac{1}{8}$  per cent on the total capital.

If a bonus of  $3\frac{1}{8}$  per cent is paid—

That is, from the province; out of the water power rentals and out of the treasury, if necessary.

—the 8-cent and 2-cent two-block rate—

That is, 8 cents for the first block of 50 kilowatt hours, and 2 cents for all power used above the first 50 kilowatt hours.

—now adopted as the uniform rate for towns and villages may also be adopted for farm electrification. The minimum bill required will be \$3.60 per month.

In other words, on those rates that I have named here, we can get the power to the farmers at an 8-cent and 2-cent two-block rate, and the minimum bill that he would have to pay per month for being connected up— if he used less than that amount he would have to pay it anyhow—would be only \$3.60 a month.

*By Mr. Ross (Calgary):*

Q. Would that pay all his costs?—A. No. What I mean by minimum bill is this. In order to support this whole project, in any stage of its development, we would have, as they go on to develop, to get a certain percentage of all the farmers in an area or else we could not do it at all. Then to those who took power from us, we would say, “For what you use, you have got to pay us a rate of 8 cents and 2 cents. But we must insist upon you using \$3.60 worth a month; and even though you do not use that much, we will charge you that anyhow as a minimum bill.”

*By Mr. Quelch:*

Q. Is it not essential, if we are going to take steps of that kind that would increase the fixed cost, to guarantee that in the future stabilization of prices will become a permanent feature, because otherwise the farmers have no guarantee they will be able to meet those costs, and if a number of farmers become bankrupt and are not able to use electricity the cost to those still using it would be increased? I have in mind the Alberta telephone system. That scheme worked fine for a few years; prices fell and a number of farmers wanted their phones taken out and the whole scheme collapsed.

Mr. MARTIN: But that would be only one reason for stabilization of prices.

The WITNESS: I would doubt whether it was. I do not want to imply by my answering these questions that I pose as an expert on this subject, because I do not. But I think there is this difference in the case of the telephone. At a certain level in farm income most people would regard the telephone

particularly for a man who was isolated, a necessity. A lower level of income might in effect transform necessity into a luxury. The farmer would say, "I have to do without something, so I am going to do without the telephone." Electrical experts tell me that that does not happen with regard to electricity; because the farmer is under the same necessity of operating a chopping machine, he is under the same necessity of having power for various farm purposes, threshing, and so on; and the fact of the matter is that even if his income goes low the cost of electricity, once he has got his investment there, once he has got his connection established, is so much lower than any possible alternative that he could use either for light or for power that even if he is hard up he will still continue to use electricity.

Mr. HILL: It pays him to use it; it is economical.

The WITNESS: Mind you, I am not suggesting for a moment the stabilization of farm prices is not desirable; it would be much better. I am not suggesting either that he, when the farm prices decline, would not watch his lights more carefully and be more economical in the use of electricity. But you will not find the difficulty that you in Alberta did, and we in Manitoba did also, in respect to the telephone. The farmer if he has to can get along without the telephone but he cannot get along without lights and power. If he is going to have light and power at all, it costs less for electricity than for coal oil and those wind motors or gasoline power or anything of that sort. If you examine this report you will find all these comparisons. We have comparisons here of just what it costs the farmer per horsepower for gasoline power and for electricity.

Mr. QUELCH: On the other hand I think it has been proven that tractors are more economical to use than horses on large-scale farms, yet many of the Canadian farmers have stopped the use of tractors because they could not find the money to buy gasoline. They have managed to get on and do some work on the farms with horses and not feed them.

The WITNESS: Yes; I say there would be a decline, but I do not think the decline would be of the order of the removal of telephones, for example, because as a matter of fact the harder up the farmer may be the greater necessity he would be under for having efficient management, and efficient management means electrification because electricity is much cheaper than any other alternative that he can use. Incidentally the farmer, I take it, is interested in stabilization of prices because of wanting to make a profit. Now, to the extent that you can decrease his cost of production it gives him a bigger margin of profit.

The CHAIRMAN: Mr. Premier, may I just say a word? There are about 35 minutes before our ordinary time of closing left, and it may be that some members would like to ask questions relating to other projects suggested in the brief. I should like to ask you two questions.

*By the Chairman:*

Q. Could you have a copy of this report filed with the committee?—A. The report on electrification?

Q. Yes.—A. Yes, I shall be very glad to.

Q. There are thirty-five members?—A. That is all right.

Q. And the Senate members would like to have them.

Senator LAMBERT: We have them.

*By the Chairman:*

Q. In connection with that I was wondering whether you would be prepared to answer a question relating to the possibility of establishing in your province an industry to manufacture the things that would be required in this scheme.

Senator LAMBERT: Electrical equipment.

*By the Chairman:*

Q. Electrical equipment that would be required to carry out this program.—A. That is a very embarrassing question.

Q. I do not mean to be embarrassing.—A. Well—

Q. Leave the question aside, then.—A. We have to meet the issue some time. We can see that if we are going to make the farm electrification program in Manitoba a success—and personally I am not one of those who believe that you can improve the economic position of the country by having a whole lot of things that do not pay—we have to pare our costs right to the bone, right to the bone; and we are going to be down to talk to you or to the government here with a view to buying the transformers and all the equipment required in this project, at the absolutely rock bottom price, in large quantities. The equipment the farmer requires we propose to buy on the same basis and turn over to him at cost, so that he will not have to pay any large intermediate cost at all.

Now, the reason for that is that where you try to bring electricity to an area that is no more densely populated than rural Manitoba, it is an undertaking of the first order of difficulty. You have to approach it in a thoroughly realistic way, and as to whether we can get these costs at the lowest possible figure by setting up a small electrical industry producing a small output in Manitoba as compared with getting them on a mass production basis, I am not qualified to judge, but, unqualified as I am, I think there is not any question as to which of the two would be the way to keep the costs down.

*By Mr. Castleden:*

Q. What mass production basis do you contemplate?—A. I mean, if you go to those who are now producing in a large way and say, "We are in the market for your goods, we have a project here that is going to provide employment for Canadians, it is going to maintain our national income, it is going to put money in people's pockets that will enable them to buy your products, and you have got to do your part by giving our project an absolutely rock bottom price so that we can make it a success."

*By Mr. MacNicol:*

Q. You would go to the manufacturer and say, "We want your lowest rock bottom price on 25,000 transformers, more or less"?—A. Yes.

Q. And 25,000 motors?—A. Right.

Q. And so forth and so on.—A. Yes, and it would have to be rock bottom.

Q. You would be met in a most sympathetic way.—A. Well, I hope so.

MR. HILL: I think, Mr. Chairman, the Premier agrees with decentralization of industry, but he proposes that anything of that nature be spread over a period of years and not to upset our economy immediately after the war. These industries should be spread out and they have to be spread out over a period after the war. It cannot be done immediately, as it would upset the economic standard of places like Ontario and Quebec which will have post-war problems. But we hope at least that these industries will be decentralized and spread in branches all over the dominion to help out the provinces which are now practically all farming provinces; but it will have to be done over a period of years.

THE WITNESS: Yes, that is true; but we do not propose to load on the backs of the farmers in Manitoba the cost of establishing even the very worthwhile project of a new industry in Manitoba.

MR. HILL: No, it has got to be done in an economical way.

THE WITNESS: On the other hand, let me make this absolutely clear: as I said, I am not an expert. If it proves in fact to be possible to produce these

articles as cheaply for the farmer to buy by having an industry in Manitoba we will certainly favour that policy.

Mr. HILL: Of course, that is understood.

The WITNESS: But when you are dealing with people who have to sell their farm products in the export markets of the world where they get the rock bottom price for what they sell, it seems to be basic that you have got to try to reach the position where they get the rock bottom price on that which they have to buy, and that is something of which we have not made a very good job of in this country.

*By Mr. Ross (Calgary):*

Q. What do you think it would cost the farmer to install the necessary equipment to electrify his farm?—A. Well, I think there is—

The CHAIRMAN: We can get that in the report.

The WITNESS: You will find it set out in the report. In the electrification report it is estimated that the cost of wiring house and outbuildings at a low level of expenditure would be \$150 per farm; at an intermediate level would be \$225; and at a high level, \$250.

*By Mr. MacKenzie:*

Q. You have already a branch of the General Electric Company in Winnipeg, do they not do any manufacturing there or are they just distributors?

Mr. CASTLEDEN: There is also a subsidiary of General Electric; do they manufacture?

The WITNESS: Unfortunately I have no knowledge as to the General Electric or any of those other companies. I do not think I can add anything to what I have said before, it is just a question of getting the cheapest equipment.

*By Mrs. Nielsen:*

Q. Mr. Chairman, may I please ask a question? To what extent has your government explored the possibility of setting up new industries which are connected with the use of surplus agricultural products? To what extent have you carried on research in the University of Manitoba on the question of utilization of wheat as a basis for synthetic alcohol? To what extent do you think this might be used to save our farming people expenses which they now have?—

A. As a matter of fact, not to any great extent. Premier Bracken and I some year and a half ago, if I remember rightly, went to see Professor Gortner of the University of Minnesota, who is one of the outstanding authorities upon agricultural chemistry on the continent, and we asked him—this was before the question of the use of alcohol in the process of rubber production came up—we asked him as to whether it would be economical to use wheat for the purpose of producing alcohol and his reply was in the negative. I rather hesitate to quote an expert upon a technical subject because I might not do his ideas justice. But as I understood it, and I underline "as I understood it," wheat has a certain number of heat units in it. You can get them out by burning wheat in the furnace just about as efficiently as you can by transforming it into alcohol, and of course at much less cost. At that time we were thinking of alcohol as a constituent of motor fuel. Possibly you may remember some public discussion which took place along those lines. He said that you can get the heat units out of the wheat just as well by burning in a stoker in the furnace without any cost as by transforming it into alcohol; furthermore, wheat is not as cheap a source of alcohol as either corn, to take another cereal, and it is not by any means as cheap as molasses.

Mrs. NIELSEN: That does not quite coincide with what Mr. Mackenzie said when he was before our committee. He said that one of the reasons why the plant had to be built at Sarnia was simply because the government had to have rubber and had to have it in a hurry and that Sarnia was the only place where the materials absolutely essential to its production were immediately available.

The WITNESS: We of course have this question on our agenda here to follow up; but I have told you of the advice that we got then from this post-war scientist whom I mentioned. He is regarded as a first-rate man, one of the best on this continent, and we had implicit confidence in his opinions. The information that I got in regard to this plant at Sarnia is—keep in mind that this is not in any way official, or anything like that—is that it was put there by the dominion government because certain materials were immediately available—I understand it is owned and operated by the dominion government entirely. is it not?

Mr. MACNICOL: Yes, it is owned and operated by the dominion government.

The WITNESS: And my information—which is quite contrary to what I had at first thought—my information is that the material from which this rubber is made in that plant is a by-product of the petroleum industry that goes to the rubber plant virtually without cost at all. Now, I do not suppose that would be a situation that would obtain under other circumstances; because when you start using any by-product it acquires value as time goes on; but, as an emergent war proposition it would be one that would be difficult to compete with, I would think. I can answer your question in this way, that we certainly have that sort of thing very keenly in mind; and you will also see on page 27 item 22 reference there to this subject matter.

Mr. MARTIN: About this electrification program and having in mind submissions from one to four on pages 24 and 25, have you any definite projects now conceived which in the post-war period would put to work under a public investment program, either dominion and provincial or either one separately, any great number of men?

The WITNESS: Well, when you say conceived—

Mr. MARTIN: I meant ready for submission.

The WITNESS: No. If you mean ready—if you mean that they are conceived, that they are worked out, the blueprints ready, the engineering data complete and practically all the other technicalities worked out; no, nothing.

Mr. MACNICOL: Then, with reference to 14 and 18—particularly let us say 14 which relates to fur; the northern part of your province is one of the great fur areas, and we have been voting here for some time large sums of money to assist in the development of fur farms. Have you anything developed in connection with that, have you anything there which would give a greater amount of employment to local people in the raising of fur?

The WITNESS: Well, we had in the Saskatchewan River delta a large area of land that you would call marsh—

Mr. MACNICOL: Something in the nature of a million acres, is it not?

The WITNESS: I am afraid I cannot answer that; I think it is upwards of a million. However, the river tends to build up its banks right beside the current of the water so that they are somewhat higher than the marshy delta on each side of the main channel. What we did there was to cut channels in these banks upstream and flood the marshes during the season of high water. Then with control dams upstream and also down the river so we could maintain the water in these large areas of marsh at the optimum level for muskrat raising. Then we patrolled it until they reached a certain peak; and after

that we have taken off our crop of muskrats. They gave a very satisfactory return indeed to the province on its investment, it showed a handsome profit. I am sorry I cannot give you the figures. And in addition to that we provide employment for a large number of trappers who, because of the falling off of trapping for one reason or another had been out of work. These areas were operated on what I suppose some people might say was a totalitarian and communistic principle. Where you have a large publicly developed area like this one without any boundaries between one man's trapping and another's, the most satisfactory way of trapping is to have them all go on and trap as much as they can, and then take the whole amount and pool it all. We then sold the entire catch of pelts at an auction sale held in the spring which being properly advertised all over the continent, attracted a lot of competitive bidders. We took the proceeds and paid out to these men so much a month throughout the year. We also established an insurance fund, in the years when the catch was good and the price high, putting aside a sum of money—if I remember rightly it was of the order of about \$30,000 or \$40,000—with the idea that in a year like the present when the catch seemed to be so indifferent in prospect that we forbade the trapping of that area altogether we are now paying out this spring by monthly payments this insurance fund. This tides the trappers over until they can get harvest work in the fall. In that way it has been a very satisfactory development; and when we say fur area development projects that is one of the things we mean. Then in addition to these swamp areas, we have other areas in which there is a condition of scarcity due to competitive overtrapping.

Mr. MACNICOL: You are varying that now?

The WITNESS: Yes—we are varying it now by giving each trapper a proprietary lease in his own trap line area, so that he has an incentive to take his crop off but not to kill his seed material. In this way we make the fur trapper the game guardian. This does not cost us anything for game guarding, and we get a more efficient game guardianship than we could get by hiring a lot of people.

Mr. MACNICOL: I was going to ask the Premier if he had in mind extending the scheme developed by Mr. Thomas Lamb of Moose Lake. I thought that scheme was very interesting—no doubt you are familiar with it and no doubt you know him very well. He is a great man.

The WITNESS: Yes, I know Mr. Lamb.

Mr. MACNICOL: His project was to pump water out of the river into the area he was using for breeding and in that way develop and enlarge his fur crop. I was wondering if anything had been done by way of extending that idea of his, pumping water out of the river on to suitable land?

The WITNESS: I am not familiar with the operational details of Mr. Lamb's scheme. As I understand it, I think it is regarded as more economical to build up the water level in the marsh areas during the season of high water and maintain that level with the use of dams where that is possible.

Mr. HILL: I notice that in the brief it says that a committee of deputy ministers has been set up; now, I presume it would not take such a committee very long to work out the cost of many of these projects and the amount of money that would need to be expended, and the number of men who could be given employment during the first year, say in such things as storage, drainage, irrigation projects. All the information needed in respect of projects of that kind I suggest could be procured from the P.F.R.A. committee; and they could also work out the details of the scheme suggested in respect to reforestation; and they could also work out something along the line of housing, because you have some splendid plans for houses and you know the cost of those houses;

and I think they should work out something along that line; and in that way you could within a reasonable time be prepared to supply this committee with a certain amount of material indicating the amount that could be expended on say four or five of these projects, and the number of men who could be employed. You have told us what you could do on electrification. Then you would be in a position to submit to us something briefly as to the expenditure which would be involved in carrying on some of these schemes say for a period of one year. I think the committee would be glad to have that.

The WITNESS: We intend to do that.

Mr. HILL: You should have that information, and then you can give us something on which we can hang our hats here and make a recommendation to the house. May I say, speaking for myself at least, that I think this committee is prepared fully to support almost everything which you have suggested in your brief; speaking for myself, I can say that I would, and I think that the committee will give it very good support.

The WITNESS: And I hope that they will support our financial proposals as well.

Mr. HILL: From the financial point of view, I think it is a responsibility of the government to see that you do get money. It is the responsibility of the dominion government to see that all the provinces get this money. That is my view and that is the view that I have held for quite a few years.

Mr. CASTLEDEN: I understand that the committees to which reference has been made are going to make a further study regarding these things. They must have been studying some of these things, such as projects which could only be undertaken at the public expense; and I notice that among them will be projects directed primarily to increasing available opportunities for private enterprise.

The WITNESS: Right.

Mr. CASTLEDEN: And in the northern part of the province I see there is some mining development there.

The WITNESS: Yes.

Mr. CASTLEDEN: You also have an outlet there at Churchill; and you have a tremendous development there of air transportation recently. There are vast resources there in water power also.

The WITNESS: Yes.

Mr. CASTLEDEN: Now, what material has the province got in the way of surveys in regard to the mineral resources of that part of the province, or of the dominion; and the question is, since the province has the authority and control of its own natural resources, to what extent can these resources provide the people of that province with remunerative employment and sufficient income to give them a decent standard of living? Has the committee been asked to give any consideration to the matter of the getting out at your government's expense of surveys of these projects; and probably to develop them on a more co-operative basis so that more people will share in the benefits derived from the natural resources of your province? What have the people gained? And to what extent do the people of Manitoba benefit from it?

The WITNESS: I am afraid there are quite a few questions there. I would say, speaking generally, that the attitude of the Manitoba government towards the development of our resources on a co-operative basis is demonstrated by what we have done with this fur area; because that is a pure benefit to the community, and outside of the money that we take ourselves for having put up the cost of the development in the first place . . . we have to have revenues to carry on with—but outside of the revenues that we take, the entire proceeds go to the producers.

Mr. CASTLEDEN: In this case it is the Indian population.

The WITNESS: No, the Indians are taken care of by the dominion and the dominion is working in co-operation with us; they on behalf of the Indian, we on behalf of the half-breeds and white trappers. Now, so far as the Flin Flon mine is concerned, and mining generally; take the Flin Flon mine, it now represents an investment of between \$50,000,000 and \$60,000,000—

Mr. MACNICOL: And there are about 10,000 people there.

The WITNESS: Yes—and if I am not wrong in my recollection there was an investment of \$21,000,000 before there was one cent of revenue taken out of it. I do not pose as an expert upon this subject, but I would be rather inclined to agree with the views expressed before this committee recently, I think it was by Dr. Wallace, to the effect that a very speculative enterprise like mining was, perhaps, the last field of human activity that should be taken away from private enterprise, in view of the pure initiative and the great speculative enterprise which the entrepreneur has shown in developing the mining industry.

Now, we are fairly cautious in the province of Manitoba, and with regard to fur farming we made fur leases to the man Mr. MacNicol referred to and to one or two others—

Mr. MACNICOL: Thomas Lamb.

The WITNESS: Yes, Thomas Lamb, and another man called Plummer, and I think there was a third man—and we let them go in and spend their money, demonstrating whether their work was a success, and then when we were absolutely sure that it was a success we went in ourselves which we were able to do because we leased to them only a small percentage of the total marsh acreage—

Mr. CASTLEDEN: But in mining you are proposing to make geological surveys at government expense.

The WITNESS: Yes.

Mr. CASTLEDEN: And when you find out that a site is likely to be profitable you are going to ask private enterprise to take it over.

The WITNESS: No, not if a *site* is profitable. Again I repeat that I am not an expert; but is not the function of a geological survey to map out a certain *area* and determine simply whether or not minerals are likely to be found there? If we want to depart from that it seems to me we have to make a complete step as they do in Russia and send out government prospecting parties and run the whole economic system from top to bottom, because surely if governments are going to go into the most speculative parts of private enterprise they certainly should go into everything else; because that is the part where the chaps who buy mining stocks pay most of the shot. I am the treasurer of the province as well as the premier, and as such I would much rather go into a sure thing than risk public money on a speculative one.

Mr. MACNICOL: Have you any intention of developing White Mud Falls?

The WITNESS: White Mud Falls must be from 100 to 150 miles down the Nelson river from its source where it flows out of lake Winnipeg, which source is itself a long way north of Winnipeg, so you could not possibly under present transmission technique get electricity at White Mud Falls back to the industrial area of Manitoba at a cost low enough to warrant its use. Therefore, the only way in which White Mud Falls could be developed would be by having some large, preferably a base mining operation, developed close enough to that site to warrant its development so as to provide a market for the use of the power. Even at the Flin Flon mine, which is much closer to White Mud Falls than Winnipeg is, they did not consider that it was an economical development, and they went to Island falls in Saskatchewan, because the cost of transmission was not so high from that latter development.

*By Mr. Quelch:*

Q. Mr. Hill stated that money should be made available at a very low rate of interest, but you no doubt feel that certain projects should be introduced as national projects—and not be charged, therefore, against the province—in a similar manner to the way that war projects are being carried out today. You hesitate to raise the hopes of the people by advocating projects and then having to drop them for lack of financing?—A. That is exactly right. I think that any reasonable, honourable, public man does not like to stir up a lot of discussion about a project and then have the hopes that are built up and the expectations that are developed dashed to the ground afterward, because it does not produce good morale in the country to have that sort of thing happen.

Q. My next question has to do with adjustment grants. Providing that suitable adjustment grants were guaranteed after the war, would you be in favour of vacating the income tax and corporation tax field?—A. Yes. Manitoba was the first province to appear before the royal commission, and it took that stand before anybody else did, and it has never backed away from that stand. We feel that the only way to properly tax wealth and income is on a national basis.

*By Mr. MacNicol:*

Q. In what areas in Manitoba have you in mind the erection of works to prevent flood damage?—A. We have two—I am not saying we have not others—but there are two that come to my mind at the moment: one is the lower reaches of the Seine river where it comes out onto the level ground before entering the Red river. Every few years there is a flood there which causes a considerable amount of economic waste. We think that that is pre-eminently a project that would be worth spending money on in the post-war period. Then, the Assiniboine river, like most of the prairie rivers, has an irregular flow, and in the spring time the freshet comes down, and particularly in the district between Portage la Prairie and Winnipeg there are serious overflows. It is considered, I think, that dyking would prevent the resultant damage and the great economic losses which have taken place there from time to time for many years.

Q. Those are sound projects?—A. Yes. No doubt we will have others, but these two come to my mind at the moment.

Mr. MACNICOL: Mr. Chairman, as I interrupted the speaker in the middle of his remarks I wish to say how much we have profited by the questions that have been asked and the answers which have been given since 12 o'clock. I trust that Premier Garson didn't take any exception to our interjections at that time.

The WITNESS: Oh, no.

Mr. MACNICOL: We all want to do what we can to help with this work, and I personally desire to encourage good fellows like Mr. Hill who are on the government side; and I would support any projects which will provide jobs.

Mr. GRAHAM: Mr. Chairman, as I followed the submission made this morning I understood that Premier Garson wished this committee to realize fully that any development program or social security program must of necessity be conditioned on the provinces being put in a reasonable financial state to tackle such programs.

The WITNESS: Yes.

*By Mr. Graham:*

Q. And believing that to be so, your feeling, following the suggestion of Mr. Hill, is that you believe it would be futile to submit great projects without that first essential being taken care of?—A. I will put it this way: we do intend

to submit concrete proposals,—and I am glad you brought this up because it gives me an opportunity of emphasizing that these projects are being considered by us and they will be submitted by us upon the assumption which, as matters now stand, we are forced to make, that if investigation shows that they should be included in the national program, then by whatever readjustment of our relation with the dominion may seem advisable we will be put in a position to carry them out. There are reasons why we are considering them in advance: we are afraid that if we do not start now and get these matters in hand and get engineering details worked out, delays will be involved which will interfere with their accomplishment.

Q. My question was this, if that is true—and I am thoroughly in agreement with you—must we not in the light of our past experience take it for granted it is going to take some time and considerable discussion to settle the financial relationship between the central authority and the provincial authority? If that is true should we not also be considering during the war very very carefully and quickly the necessity of putting the provinces in a financial position to carry on such programs?—A. Quite.

Q. Is the time not ripe, therefore, for this committee, if they accept your advice, to recommend such a conference so that consideration may be given to that vast problem of the financial position of the provinces?—A. I entirely agree with your statement. I think now you should have much less difficulty than on any previous occasion because now you can say to the governments concerned, "We have got to have a post-war program; here it is and this is what has to be done if we are ever going to have it carried out."

Mr. HILL: Mr. Chairman, as I see the matter it is this way. These provinces are going to tell us what their unemployment problem is liable to be after the war. Unless they submit to this committee certain projects which it will be necessary to take care of and on which we can base the amount of financial assistance that is required for this province we cannot say to the government what is needed; if we are placed in a position where we can say that Manitoba has got to spend so much money within its boundaries to take care of the unemployment problem after the war, and that Manitoba as a province is not able to do that and therefore it is the responsibility of this government to do certain things to assist up to a certain point or assist beyond that then we can make a recommendation but the dominion government has got to take care of it and unless we know what the financial requirements are going to be we cannot recommend to the government that Manitoba's requirements up to a certain amount have got to be taken care of or New Brunswick's or Ontario's or British Columbia's. Therefore, we must have something definite in the way of projects and the cost of them, something on which to hang our hat so that we can make a recommendation to the government.

The CHAIRMAN: Premier Garson has already told the committee that the province of Manitoba is now endeavouring to do that very thing. Have you a motion, Mr. MacNicol?

Mr. MACNICOL: I move a motion of thanks and appreciation for the splendid presentation by the Premier of Manitoba.

The CHAIRMAN: I am sure I am speaking for all members of the committee when I pass that motion on to you as duly carried. It was an excellent submission.

The committee adjourned at 1.05 p.m. to meet again on Thursday, June 3rd, 1943, at 10 o'clock a.m.











Doc. Reconstruction and Re-establishment  
Special Committee, 1943/44  
SESSION 1943  
(HOUSE OF COMMONS)

SPECIAL COMMITTEE

ON

(RECONSTRUCTION AND RE-ESTABLISHMENT)

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 20

THURSDAY, JUNE 3, 1943

WITNESSES:

- Mr. W. M. Neal, Vice-President, Canadian Pacific Railway;  
Mr. J. E. Armstrong, Chief Engineer, Canadian Pacific Railway, and  
Chairman of the Company's reconstruction and re-establishment  
committee;  
Mr. T. C. Macnabb, in charge of operations in the Maritime Provinces;  
Mr. D. B. Wallace, Assistant to the Vice-President, and General Manager  
of Canadian Pacific Air Lines.





## MINUTES OF PROCEEDINGS

THURSDAY, June 3, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 10.00 o'clock, a.m. Mr. J. G. Turgeon, the Chairman, presided.

The following members were present:—Messrs.: Bence, Bertrand (*Prescott*), Black (*Cumberland*), Castleden, Gillis, Gray, Hill, McDonald (*Pontiac*), MacKenzie (*Neepawa*), Mackenzie (*Vancouver Centre*), MacNicol, McKinnon (*Kenora-Rainy River*), Marshall, Matthews, Purdy, Quelch, Ross (*Calgary East*), Ross (*Middlesex East*), Sanderson, Turgeon and Tustin.—21.

Also present were:—Hon. Senator King and Hon. Senator Lambert.

Mr. W. M. Neal, Vice-President, Canadian Pacific Railway, was called. He introduced the following officials of the Company:—

Mr. J. E. Armstrong, Chief Engineer; and Chairman of the Company's Committee on Reconstruction and Re-establishment.

Mr. P. C. Armstrong, Special Work.

Mr. T. C. Macnabb, in charge of operations in Maritime Provinces.

Mr. C. A. VanScoy, Immigration and Colonization.

Mr. C. E. Jefferson, Traffic Manager.

Mr. N. R. Crump, Assistant to the Vice-President.

Mr. D. B. Wallace, Assistant to the Vice-President, and General Manager of the Canadian Pacific Air Lines.

Mr. E. A. Leslie, Comptroller.

Mr. T. Harry Smith, in charge of Press Department.

Mr. R. G. McNeillie, Passenger Traffic Manager.

Mr. Neil then presented his brief and was examined.

Mr. Wallace, Mr. J. E. Armstrong and Mr. Macnabb were also called and examined.

Mr. Sissons, M.P., by leave of the Committee, examined the witnesses.

The Chairman thanked Mr. Neal and the other witnesses for their evidence and the witnesses retired.

The Committee adjourned at 11.55 a.m. to meet again at the call of the Chair.

J. P. DOYLE,  
Clerk of the Committee.



## MINUTES OF EVIDENCE

HOUSE OF COMMONS,  
June 3, 1943.

The Special Committee on Reconstruction and Re-establishment met this day at 10.00 o'clock a.m. The Chairman, Mr. J. G. Turgeon, presided.

The CHAIRMAN: I am sorry that it was necessary to call this meeting so early, at 10.00 o'clock in the morning. However, I want to let these visitors from the Canadian Pacific Railway know that it is not early simply as hours go but because of the work which members do. I think this morning some of the members had to go to church as well as do some of their work. We are meeting at 10.00 o'clock because President Benes of Czechoslovakia is with us at 12 o'clock. Therefore we shall try to get through in time to permit all members who wish to hear President Benes to be at that gathering.

You have all had the brief of the Canadian Pacific Railway in your hands for some days, and you possibly have full knowledge of what the Canadian Pacific representatives will tell us. We have with us Vice-President Neal of the Canadian Pacific Railway. I am going to ask him if he will take just a minute or so, if he wishes, to introduce to members of the committee those who are with him here to-day. Then Mr. Neal will give his evidence. We will have questions when Mr. Neal is finished, if that meets with the pleasure of the committee.

Mr. W. M. NEAL, Vice-President, Canadian Pacific Railway, called.

The WITNESS: Thank you, Mr. Chairman and members of the committee. We have with us Mr. J. E. Armstrong who is our chief engineer and is chairman of the company's committee on reconstruction and re-establishment; Mr. P. C. Armstrong, who collaborates with him on special work; Mr. T. C. Macnabb, who is presently in charge of operations in the maritime provinces and who spent many years in the western and northern parts of Canada. I might ask the following gentlemen to stand as I mention their names: Mr. C. A. VanScoy, immigration and colonization; Mr. C. E. Jefferson, who is our freight traffic manager; Mr. N. R. Crump, assistant to the vice-president; Mr. D. B. Wallace, assistant to the vice-president and general manager of the Canadian Pacific Air Lines; Mr. E. A. Leslie, our comptroller; Mr. T. Harry Smith, who is in charge of the press department; Mr. R. G. McNeillie, who is our passenger traffic manager. These gentlemen are here particularly in a position to answer from their own personal knowledge such questions as members of the committee may desire to present to them, so that we will, in that way, we think, save some time.

May I say, as a preface to my written submission, that when the question of making a presentation to the committee was introduced, it was said that a committee of officers of the company had been established and were then engaged in making surveys and studies for the purpose of submitting recommendations to the company in due time as to the amount of work which could be done and what that would mean in the way of employment, or in other words how many man days will be utilized as a contribution to the solution of the national problem of post-war readjustment. I said then it would take at least six months to complete the preliminary studies; in other words, they would not be completed until some time next autumn. The desire was expressed then that the company submit an interim statement which would indicate along general lines what it had in mind. For that reason, nothing specific in the form of details of work or money or man days is included in this present submission. It may be that later

in the deliberations of your committee a supplementary report will be required from the company; and I hope at that time we will be in a position to comply with your wishes. May I now present our submission.

*Mr. Chairman and Honourable Members of the Committee:*

1. The management of the Canadian Pacific Railway Company appreciates your invitation to place before your honourable committee some information concerning this company's plans for post-war activities. It will be understood, of course, that at this stage of events it is impossible to furnish you with precise and definite information as to the details of projects to be undertaken, and that this submission, although based on the results of careful preliminary consideration, is necessarily general and is placed before you in the hope that it will be of some assistance to your committee in your studies.
2. Public service corporations are not created unless the government is satisfied that the undertaking authorized is in the public interest. Corporations so authorized are, quite properly, held to be created not only for the advantage of their owners, but because it is believed that their operations will add to the wealth and prosperity of the nation. It follows quite naturally that such a charter carries with it obligations as well as rights.
3. The Directors of the Canadian Pacific Railway Company have always been fully aware of the fact that this Company, one of the first major Canadian undertakings to be chartered, was created for the purpose of aiding the development of the nation. It was, indeed, chartered in order to carry out the Pact of Confederation with British Columbia and to consolidate the youthful dominion by providing it with an adequate system of transportation. The management of the company believes that it has a continuing obligation to conduct its affairs with the closest possible regard to the general interest of the nation, and believes that the public shares this view.
4. This, of course, corresponds very closely with the economic interest of the company. There may be private corporations which can prosper under conditions in which the economic activity of the nation as a whole is at a low level and large numbers of individuals are unemployed, or otherwise deprived of an opportunity to earn a living of satisfactory standards. That cannot be the case, however, with this company. Engaged, as it is daily, in the transportation of the raw materials and finished products of the whole nation, and in providing facilities of travel and communication to citizens throughout the dominion, the volume of this company's business is an index of the total income, in the form of goods and services, of the people of Canada. The one economic objective of this company is and must be so to conduct its affairs as to contribute as much as possible to raising the income of the citizens of Canada to the attainable maximum. On the maintenance of this income above a certain level depends the ability of the company to earn a profit.
5. For some years before the outbreak of the present war the income of the Canadian people was at a low ebb. Farmers generally were receiving low prices for their products, western agricultural production was seriously diminished by recurring severe droughts, and unemployment was general among all other classes. During that time the workers of the Canadian Pacific Railway were unable to obtain full time employment, and the owners of the company, although its capitalization was of the soundest type and on a most reasonable scale, were without any return on their investment.
6. Wartime experience suggests that such depression in economic conditions may be unnecessary, and that when peace is restored, it should be possible, under correct national policies, for private enterprise to provide employment and a fair standard of living, not only for all the present inhabitants of Canada but for a considerable addition to our present population. Every economic

reason exists for the owners and management of the Canadian Pacific Railway Company to hope that this improved situation will be realized, and to make every effort to contribute on the largest possible scale toward this end.

7. The confidence of the management in the ability of Canada to attain such a reasonable level of prosperity has taken the form of instructions to a committee of senior officers of the company to prepare tangible plans for the improvement of the company's facilities, on the firm assumption that when victory has been won full employment and a general condition of reasonable prosperity will become the normal and continuing economic situation in Canada.

8. Confidence in ability to maintain such a condition requires certain further assumptions. One is that the forces of freedom will win a complete and decisive victory and that peace will bring with it that freer development of international commerce and exchange which is necessary for a lasting peace. Another is that Canada will continue to be a free democracy in which the individual has freedom of thought and person, and the right to acquire and possess property and to enjoy it undisturbed, subject only to his obedience to constitutionally enacted laws and the payment of lawful taxation. Still another is that private enterprise will be the basic source of our economic activity, with the state confining its activities to those which private enterprise cannot properly undertake. It is also assumed that, under legitimate types of collective bargaining, labour will co-operate with those who furnish it with capital, so as to maintain full employment under free enterprise. Finally it is assumed that the capital required for economic progress will be provided as the result of the free decision of each citizen concerning the portion of his income which he will save, and that it will be regarded as legitimate for prudently invested and wisely administered capital to earn such return as is necessary to encourage this provision of capital at the rate which the prosperity of the nation requires.

9. Under these assumptions it is believed that after allowing for the retirement of housewives, pensioners, students and young persons from employment necessitated by the war, and the return to civil life of members of the Armed Forces, full and continuous normal employment for all citizens can be attained.

10. On these assumptions, which are basically necessary to the functioning of a free society, the committee of officers of the company has been instructed to prepare a program of improvements to the company's properties which will enable the company, in collaboration with other interests similarly engaged, to furnish adequate transportation services for a Canada in which full employment will continue after the war, and in which economic activity will be on a steadily increasing scale as the population of the Dominion grows and brings into fuller use the natural resources of the country. The program will include only projects which the company is satisfied will be required under the conditions which have been outlined. In order to realize the economic nature of this program it may be well to describe briefly the situation which should reasonably be expected to exist in the event of termination of the war in the comparatively near future.

11. Prior to the coming of depressed economic conditions somewhat over a decade ago, the facilities of the company were developed and maintained to a high standard. Dividends had been regularly paid to shareholders which might appear to be generous in relation to the par value of the shares, but which represented in fact a relatively low percentage rate on the actual investment in the property, of which a substantial proportion had been paid for out of earnings that might otherwise have been distributed as dividends. During the depression, which fell with special force on agriculture in Western Canada and therefore deeply affected this company, the company reduced and then

ceased the payment of dividends and instituted a regime of rigid economy in maintenance expenditures. Fortunately, owing to the excellent condition of the property at the commencement of the depression and to improvements in technical practice during the depression, it proved possible to follow this maintenance policy without deterioration of the traffic handling capacity of the property. Actually this was greater in 1939 than in 1929.

12. The outbreak of war, therefore, found the company in a position to place at the service of the nation a property which, while not as well developed at the end of those ten years of depression as it would have been had they been ten years of prosperity, was in first class operating shape and capable of carrying the heavy burden of traffic which war conditions imposed upon it.

13. During the war, while the cost of material, equipment, supplies and labour has increased without a compensating increase in the charges for the company's services, the volume of traffic has been such that revenues have been available which, even after the payment of greatly increased taxes, would have permitted not only full maintenance of the property but an opportunity to renew a program of improvements, including newer and better types of motive power and rolling stock. However, the urgent need of materials and man-power for other war purposes made it impossible to carry out such activities, except as they were unavoidably necessary to enable the company to carry on its functions.

14. The result is that during the war, under the severe stress of the heaviest traffic in its history, the company has been unable to secure all of the labour, material, equipment and supplies which otherwise it would have expended on its property. For example it has not been possible to do all of the drainage work, the ballasting and the relaying of steel rails which were desirable, or to provide those replacements of motive power and rolling stock necessary to maintain an adequate inventory. In fact the present equipment is now being operated so close to the limit of its capacity that there is little margin with which to handle possible future traffic unless it proves possible for the government to permit the use of the labour and materials required for some immediate additions and those required from time to time.

15. If such permission can be granted there is no reason why the Canadian Pacific Railway will be unable to carry its full share of the great volume of traffic which must be moved for the duration of the struggle. After the war it will be necessary for the company to enter promptly upon a program of replacements and improvements.

16. Thus the company will have available, as a backlog of desirable activities in the post-war period, a large amount of work, some of which may be regarded as in the nature of improvements which would have been undertaken during the ten years which preceded the war had financial conditions permitted, some of which would have been undertaken during the period of the war had that not been a war period, and some of which will arise from the necessity of correcting effects produced by the severe strain of wartime traffic.

17. This work will be additional to improvements and maintenance on the scale on which these were conducted for some years before the outbreak of war.

18. The Canadian Pacific Railway Company is engaged in many forms of activity. Some of them do not present the same opportunities as are given to a manufacturing corporation to consider new lines of business and new products as affording the occasion for expansion of employment and production. Railway operations in particular, employ chiefly stationary and mobile equipment of massive and solid type, and even where technical progress leads to a decision to adopt new types of equipment, ordinary economic prudence prevents the hasty scrapping of equipment with many years of useful life in it. The annual gross income of many, if not most, manufacturing corporations

exceeds, in some cases exceeds many times over, the total capital invested in their properties, while the annual gross income of a railway is but a fraction, in many cases a very small fraction, of the capital invested in its property. The post-war reconstruction employment furnished in connection with railway operations, therefore, must largely arise from the process of correcting maintenance conditions and carrying out deferred improvements.

19. The Canadian Pacific Railway Company engages in other forms of transportation, and in connection with these there will unquestionably be major changes in the direction of adopting new methods and new types of equipment.

20. Its ocean fleet has become a part of the great auxiliary fleet of the allied navies, or is in the service of the Ministry of War Transport of the United Kingdom. In both of these employments severe losses have been occasioned by enemy action. The character of future ocean transportation is too uncertain to permit of definite comment at this time.

21. The tremendous growth in highway transport following the war of 1914-1918 has provided an important new facility in the field of land transportation. Its advantages in certain respects have been evident for many years. Unfortunately, however, the destructive competition which developed, particularly in connection with the transportation of freight by motor vehicle, the lack of an adequate national policy of regulation, and the policy of the provincial governments in permitting the use of highways without ensuring that commercial services are charged their fair share of the cost of construction and maintenance of the highways so used, have made it impossible up to the present to determine the economic value of this form of transportation. Any successful plan for co-ordinating it with other forms of transportation must proceed upon the assumption that conditions of regulation and taxation in regard to highway transport will be rationalized.

22. Recognizing that commercial use of motor vehicles has a real place in the transportation field, the Canadian Pacific Railway Company has for some years been conducting limited highway services in connection with, or in substitution for, certain of its rail services. The extent to which its expansion of highway activities can be developed depends upon the adoption of a government policy which provides for effective regulation of the highway transport industry.

23. The company has, in recent years, interested itself in air transport on a very large scale, and now employs some thousands of men in the conduct of air operations which cover great areas of Canada. As a result of its pioneering development of the service which later became the Royal Air Force Ferry Command, the company has also obtained invaluable experience in trans-ocean air operations. It is the intention of the company to expand its air operations both within Canada and abroad as far and as fast as opportunities offer, consistent with government policy.

24. In this field it is believed that the vast distances in Canada and the strategic geographical position of the dominion in relation to the air routes to Europe and Asia constitute a special reason for development of Canadian air services on a scale sufficient to provide an extensive opportunity for employment to the returned members of our heroic air force.

25. In addition to its transportation services the company operates a great communications system. It is necessary in the public interest that the plant and equipment involved in such operations be maintained on an increasingly efficient basis in keeping with improvements which already have been effected and improvements which it is expected will be effected under the post-war plans of the company. For example, in addition to performing the ordinary functions of a domestic and overseas telegraph service, increasingly important long-distance

telephone and radio broadcast transmission services are being provided transcontinentally. There is a considerable field of work in putting into effect in the company's communications services further technical improvements in the arts of telegraphy, telephony and radio which are being developed through research. Fields for substantial employment will open up as a necessary corollary of these developments.

26. The Canadian Pacific Railway Company always has been a leader in the matter of immigration and colonization. When the company was first chartered the government of Canada, as part of the contractual arrangements with the company, turned over to it some 700 miles of completed railway lines, \$25,000,000 in cash and 25,000,000 acres of Crown lands in western Canada. The government's view of the value of these lands at that time is indicated by the fact that 6,793,014 acres were surrendered by the company to the government in 1886, one year after completion of the railway, for a consideration of \$1.50 per acre. Minor grants of Crown lands were also made to other railway companies which have since passed into the possession of this company. The construction of the company's railway led to such development in western Canada that during the subsequent half century the company has received, from the sale of townsites and irrigated and non-irrigated lands, funds aggregating almost \$160,000,000, but in connection therewith its expenditures, including those for immigration, land settlement and irrigation, have amounted to nearly \$125,000,000. If account be taken of expenditures on branch lines to open up these lands, and of the carrying charges during the period in which many of these lines remained unproductive, the expenditures considerably outweigh the receipts. It was basically the original grant of Crown lands which made it possible for the company to assist, effectively as it did, in the promotion of immigration and the land settlement of western Canada.

27. The bulk of the arable lands included in these grants has now been disposed of, and there remains no corresponding source of funds from which the company can draw for the encouragement of post-war immigration, and no great land holdings which it can make available for settlement. On the other hand the long experience of the company in this field has enabled it to co-operate very closely with the dominion and provincial governments in obtaining from abroad desirable new settlers and in land settlement projects in all parts of Canada, and as far as the public authorities desire, the company will continue and expand this co-operation to the limit of its ability.

28. The company operates many other facilities and services and these also will offer opportunities for employment.

29. In studying the program which can and should be undertaken by the company, the committee of officers has been instructed to prepare a schedule of projects and to make at least preliminary preparations for their execution. That is the studies which are being made are not in any way theoretical. They do not represent what might conceivably be done, but what the company should do as conditions make it desirable and possible to carry out the various projects.

30. None of the projects under consideration has been chosen, or will be carried out, unless it can be demonstrated to represent a sound investment of money. It does not appear to be a reasonable function of a private corporation in a country such as Canada, where the opportunity for the creation of wealth is great, to make work for the sole purpose of furnishing employment. Presumably the government of Canada regards it as its duty to furnish temporary work for unemployed citizens and it is assumed that the government will, if necessary, and to the extent required, furnish employment in useful undertakings such as could not be carried out by private enterprise. Private corporations can best assist the government's plans by wisely using their own resources to increase the national production of wealth and to reduce the cost of this production.

31. On the other hand it would be the desire as well as the duty of the company to make its post-war activities such that they would occupy a useful place in the general reconstruction program of the country, as that is defined by the government, and for that reason it is proposed that the projects which the company has under study will be undertaken in such order and at such times as would make them most useful in absorbing any surplus labour which may become available.

32. Some of them require chiefly unskilled labour, either in the company's employ or in the preparation of materials which it will purchase. Others will involve employment by the company, and by those from whom it makes purchases, of semi-skilled and skilled labour. Yet others would produce employment for highly skilled technicians.

33. The three classes of labour cannot be completely segregated. It is obvious that the expenditure of money for the production of any goods or services produces employment of all types. For example, the ordering of a locomotive stimulates employment in the production of iron ore, coal and other minerals, as well as other employment in the processing and assembling of materials. The reconstruction of a pole and wire line furnishes employment to woodsmen, as well as to copper miners and other classes of workers. It is possible, however, to say that certain projects would employ more unskilled, or more semi-skilled, or more skilled workers, and it is the hope of the company that it will be possible for the government to furnish it, from time to time, with counsel as to which type of work should, in the general interest, be pressed at that particular time.

34. The committee of officers previously referred to is a continuing one, and is charged with the preparation of definite plans for post-war activities. Its studies have progressed to a point at which it is possible to say the company may reasonably expect that under the assumptions already given, its post-war expenditures for special maintenance and deferred improvements, for some years after the war, should be sufficient to sustain the company's total direct and indirect employment of labour at a level close to that now existing.

35. This must not be interpreted as an undertaking that the company will then employ a staff as large as now exists, but as an estimate that post-war employment, including both employment directly by the company and employment created by the company's expenditures for material, equipment and supplies, will keep the company's total contribution to national employment at a level approximately that now existing.

36. The activities under study include among other things large-scale special maintenance projects, and improvement of tracks and bridges in anticipation of increasing public requirements and increasing capacity and weight of locomotives; some new line construction to serve areas now settled and not served by railway, and to open up new areas for settlement; construction, enlargement and improvement of such structures as shops, engine-houses, freight sheds, passenger stations, fuel and water plants. We expect there will be additions to and replacements in the coastal steamships, equipment and facilities.

37. It is expected that the proposed plan to expand the air transport of first-class mail will offer opportunities for greatly increasing the number of communities which now have ready access to air service, and there is reason to forecast a new type of tourist and holiday traffic by air. This company, now the leading Canadian carrier of commercial air cargo, looks forward to expansion in this service also. The company's present northern bases and facilities, and the facilities of its aerial surveys division, will also be expanded as required if, as expected, dominion and provincial governments require them for inventories and development of natural

resources. Air transport employs approximately ten members of ground staff to each member of flying personnel, so that even a modest increase in aircraft units in operation creates considerable employment for skilled technicians and others.

38. In addition to these varied projects the company will have to purchase locomotives, rolling stock, signal and interlocking apparatus, airplanes, radio and other transmission equipment, steamships and so forth. While these purchases will create relatively little direct employment within the company's service they will create a very substantial volume of employment in other industries.

39. There remain the very obvious questions as to the time of commencement of these projects and whether the company can economically finance them.

40. It must be clear that the time of commencement will be governed in large measure by the urgency or otherwise of the project and by the specific classes of labour available. Information provided by the government in the latter regard will have a major effect in determining the types of projects to be launched immediately and from time to time. Some projects, once undertaken, must be carried to completion at a predetermined rate, over a certain period, if they are to be economically executed. Many others, however, can readily and economically be expedited or retarded from time to time as required. Those projects which are necessary for the adequate maintenance and operation of the company's property will, of course, have to be carried out as soon as possible after the war.

41. On the question of finance it may be pointed out that there are two types of projects. There are those which are in the nature of special maintenance of the property, and those which may be classed as betterments and extensions. It is the expectation of the company that it will be able to pay for all maintenance projects out of its special reserve funds and earnings. In respect to the projects involving betterments and extensions it would seem reasonable, in view of the improvement in the company's debt situation which is being effected, that provision of the necessary funds within the bounds of prudent investment will be possible.

42. It will be appreciated that successful financing of the projects by the company is predicated on a condition of reasonably full employment existing in Canada after the war, with wage and price levels which will enable this employment to be maintained, and with regulation of the company's charges for its services which will be sufficiently flexible to meet changing economic conditions, all to the end that the operations of the company may prove modestly profitable in the future as they did up to the coming of the ten years of depression preceding 1939.

43. In the decade of active business prior to 1929 the return earned on the investment in the company's railway system averaged 4.10 per cent. During that period it was possible to issue ordinary shares which found a ready market, and fixed securities which bore reasonable carrying charges. As a result of the renewal of business activities produced by the war the company earned 3.90 per cent in 1942 on the investment in its railway system, while the return on the property of the United States railways as a whole was 5.56 per cent. It is reasonable to expect that with earnings on this level, the railway industry will again be able to obtain new capital.

44. Such ability to raise capital on fair terms is essential to the successful conduct of private enterprise. With business activity on a good scale in Canada, which is simply another form of describing a condition of full employment for the people of Canada, there should be no reason to doubt the company's ability to

earn sufficient profits to pay a reasonable return on capital invested in its undertakings and to look forward with confidence to being able to obtain what new capital it may require for prudent investment.

45. The company believes, therefore, that it is possible for it, within the ordinary rules of business prudence, to make a valuable contribution to the post-war stimulation of employment in Canada and to the re-establishment of general prosperity in a country which assuredly stands out among the nations of the world in the opportunity which it offers for a great increase in both population and wealth.

46. It should be made absolutely clear, however, that despite a belief in the possibility of being able to carry out a large volume of post-war works, the company fully realizes that this possibility depends on factors outside of its control. Certain assumptions have already been given as to the kind of economic and social structure in which the company might expect to carry on its undertakings profitably. Should the same condition of general alarm over international and internal political prospects exist after the war as existed in the decade before the war, it would be entirely hopeless for the company to attempt to furnish any such scheme of reconstruction work.

47. The company entered the decade of depressed business with an increased burden of fixed charges resulting from an active program of development of its property in the years of activity preceding the depression. This burden increased further during the depression, but more recently it has been possible to reduce it to more nearly pre-depression magnitude. It would be the reverse of a sound economic policy for the company to undertake again materially to increase its fixed charges unless there is every reason to believe that Canada, after the war, will not revert to the same condition of business depression which existed before the war.

48. It is, therefore, an essential part of any post-war undertakings of the company that there should be fully warranted confidence in the maintenance and expansion of economic activity in Canada. If for example, it be impossible for reasons beyond the control of the company, to obtain proper adjustments in authorized rates of charges and in costs of operation, when these adjustments are necessary, it will be quite clear that the company's operations could not provide the necessary funds.

49. There must be an adequate margin at all times between gross earnings and working expenses. Working expenses are governed by costs of material, equipment and supplies, and by wage rates, all of which in normal times must vary as economic conditions require. Gross earnings are governed by freight rates and passenger fares, the price at which transportation is sold. It follows, that in order to provide the necessary margin of net earnings these rates and fares must be sufficiently flexible to meet changing conditions if the railway is to function successfully.

50. It must also be evident that there should be more complete regulation of highway transportation than existed before the war. It is not suggested that there should be restriction on sound economic growth of this or any other enterprise, but that the nature and direction of this growth should be so controlled that its full development would be encouraged without uneconomic competition with other equally, in some cases even more, necessary enterprises. It is taken for granted that after the war highway transportation will regain a considerable volume of the traffic it has turned over to the railways as a result of war conditions. It is to be hoped, however, that public policies will be such that the division of this portion of the transportation field can be arranged to the best advantage of the nation by true economic competition and not by uneconomic and consequently destructive competition.

51. Basically there is good reason to believe that the company can wisely plan and execute improvements and expansions in its services on the scale suggested. This assumes, however, it must again be pointed out, public policies which will permit recovery and increase in both international and national commerce, increased opportunity for industrious settlers to make their homes in Canada, cessation of agitation which alarms and disturbs the minds of investors and inhibits saving, and recognition that prudently invested and well administered capital will be permitted to enjoy the rewards which it honestly earns.

52. The activities of the company can contribute to the restoration of prosperity, only if the public policy of the nation be designed and declared as intended to permit this prosperity to be realized under free enterprise.

The CHAIRMAN: Gentlemen, you have heard the reading of the brief by the vice-president of the C.P.R. I may say here that about the middle of June this committee will have the Canadian National Railway before it. We are open for questions now. Once more I just want to mention that at noon I think most of the members wish to go to hear President Benes. We are ready for questions.

*By Mr. Gray:*

Q. My question is, having heard part of the brief and glanced over the rest of it what definitely does the C.P.R. propose?—A. Prior to commencing the reading of this statement I said when the company was requested a couple of months ago or more to appear before the committee that we had then prior to that time set up a committee of senior officers of the company whose task it was to make a survey of conditions of the property and to submit in due course recommendations which would finally resolve themselves down to the employment of so many men for so many months or years. That necessarily is something which could not be carried on in the middle of winter and would take at least six months to have in preliminary substantial form. We were asked if we could arrange to appear before the committee and state generally and as briefly as possible what our thoughts were, and that is this. In due course we will be able to say how many millions of dollars we will spend for this, that, and the other thing, and how many men we are going to employ but not yet.

Q. You are not prepared to do that now?—A. We could not; it is impossible.

*By Hon. Mr. Mackenzie:*

Q. I suppose it would be safe to assume there will be a tremendous increase in rolling stock necessary after the war due to the strain on the equipment now.—A. That will depend to a large extent on the volume of traffic immediately following the war but necessarily we will have to purchase large numbers of locomotives. We cannot get any now. Locomotive manufacturing capacity in Canada at the present time is tied up with the exception of a few engines which were ordered a year ago last January.

*By Mr. MacNicol:*

Q. Would you purchase all in Canada?—A. We never buy anything in the way of rolling stock in the United States or outside of Canada except for one item which is not manufactured in Canada and that is Diesel electric switching locomotives, of which we have five on order. No passenger cars are being constructed during the balance of the war and necessarily we will have to get passenger equipment because we hope we will still be able to compete in that direction.

*By Hon. Mr. Mackenzie:*

Q. You have a great interest in air transportation in the northern country. I had the pleasure of flying over your line last winter. Is it a fair question to ask as a matter of policy if the company is thinking of any other development in that northern country allied or associated with your air transportation policy?—A. We are thinking about it a great deal, but that is a question I do not feel at liberty to discuss until such time as the government tells us something.

*By Mr. Gray:*

Q. Arising out of the Minister's statement, in paragraph 37 you say that this company is now the leading carrier of commercial air cargo. Is that right?—A. Yes, sir, and I can give you the figures if you like.

Q. A few weeks ago we had the Canadian National Railway here and they said they were?—A. Not freight cargo, pardon me. Trans-Canada will not say they are the biggest carrier of freight because, of course, the record speaks for itself. Here are the figures for the information of the committee. This will give you some idea of the comparative traffic and volume and mileage of the two lines. Canadian Pacific Air Lines, number of miles of licensed routes, 27,996; T.C.A., 4,857. In explanation of that I may say that these licensed routes for the Canadian Pacific Air Lines cover a substantial mileage in the northern and arctic regions which are not covered daily as Trans-Canada do but which are covered monthly and in some cases more seldom than that and in other cases as required according to charter flights. Passenger traffic, revenue passengers carried—and this is where the excess of the T.C.A. comes in—they carried in 1942, 104,446 passengers and the Canadian Pacific, 57,778. Mail traffic, T.C.A., 2,308,812 lbs.; Canadian Pacific, 1,708,239 lbs. This is where the cargo figure comes in; Canadian Pacific revenue goods carried, that is in pounds, 1942, 9,659,466; T.C.A., 362,000. That is express. As a matter of fact, freight haulage by air, which is necessary in northern Canada, is handled almost exclusively by the Canadian Pacific. It is one of the large air cargo carriers of the world. It occupied at one time the premier position, but the biggest freight carrier by air in the world now is the United States Army.

*By Mr. MacNicol:*

Q. What is the heaviest load of your air transport in Canada?—A. I will let Mr. Wallace answer the question, the flying boxcar.

Mr. WALLACE: Six thousand pounds.

*By Mr. MacNicol:*

Q. I read an article a while ago that after the war they would be flying transports from Edmonton carrying 50 tons?—A. I hope so.

*By Mr. McKinnon:*

Q. Mr. Neal, in the development of arctic flying that is largely contingent on the economic development that takes place there; is that correct?—A. Yes. Of course, anybody who has been up north—I do not know whether you have, Mr. McKinnon—I have been up there and the conditions that one sees, the potentialities, the natural resources, are a challenge to the imagination.

Q. Do you visualize air activity or aircraft that will compete in heavy transport?—A. Only in places where there is no other form of transport. That is, the heavy cheap traffic must be handled by the cheapest form of transportation and that is rail. We handle everything imaginable in the northern areas

by air because that is the only way to get it there except by dog team in winter or boat in the summer.

Q. With the new engines that are being developed and the new aircraft that are possible with greater lifting capacity than any aircraft have today, over long distances and high grade traffic would you consider that aircraft would be a serious competitor?—A. In high classes of express, but that only.

Q. High classes of express?—A. Where the money value is so high it pays to handle it by air.

Q. In regard to northern flying I presume that you are all the time considering ways and means whereby you can develop aircraft for arctic flying?—A. That is a matter on which the aircraft designers are all working. Our experienced aircraft operators work with them. Necessarily those studies to a great extent are limited by conditions of war. At the same time a great deal of information is being accumulated.

Q. I notice where you did the pioneering on the Atlantic route?—A. Yes.

Q. You are not handling that now?—A. No.

Q. The company did make a real success of that?—A. Yes, we had the original arrangements with the government in connection with the Atlantic ferry command. Later on it was taken over by the Royal Air Force Ferry Command.

Q. There is no reason if you had continued that after doing the pioneering why you could not have done just as good a job as has been done?—A. We have so much confidence in our air operators we think they could have done as good a job.

*By Mr. Gray:*

Q. I would like to know this; are you definitely out to compete with the T.C.A.?—A. Absolutely no. I may say in amplification of that the T.C.A. operates Trans-Canada and at no place are we operating a trans-continental route. We operate north and south and the T.C.A. are operating east and west. One service is complementary to the other.

Q. Are you absorbing other lines that would be feeder lines to the T.C.A.?—A. We have, and that is the understanding. We have absorbed those feeder lines and we interchange traffic with them which from a transportation standpoint obviously is an eminently sensible arrangement. Instead of competition we have co-ordination.

Q. Is that in co-operation with the T.C.A.?—A. We bring traffic into Edmonton and hand it over to the T.C.A. and they take it on. We bring it in to Regina and hand it over to their transcontinental service. They bring traffic into other points and hand it over to us.

Q. You say that is a definite arrangement with Mr. Symington, with the T.C.A.?—A. No, I did not mention Mr. Symington.

Q. With the T.C.A.?—A. I merely mentioned the fact that there is no competition there. There is an exchange of traffic.

*By Mr. Hill:*

Q. Your lines are feeders to the main lines?—A. Yes.

*By Mr. MacNicol:*

Q. Do your air lines operate as far as Aklavik?—A. Yes.

Q. You are now looking after that whole field?—A. Yes.

*By Mr. Quelch:*

Q. Even under the most favourable conditions after the war, you do not expect to be able to expand your employment of labour. As a matter of fact,

you feel you will be doing well if you can maintain employment at its present level?—A. If we could do that, because we are handling the heaviest traffic now in the history of the company, and it is getting a little heavier all the time. And while there may be—and no doubt will be—following the war some reduction of the traffic, we will take up the slack there in this maintenance we speak of, and special work.

*By Mr. Bence:*

Q. There is one thing which made an impression throughout your brief, as I see it; that is you feel that your contribution, as far as reconstruction is concerned, is predicated upon the same condition of international and national policies or conditions not being in existence as were in existence during the ten years of depression. For instance, in paragraph 46 you say:

Should the same condition of general alarm over international and internal political prospects exist after the war as existed in the decade before the war, it would be entirely hopeless for the company to attempt to furnish any such scheme of reconstruction work.

You also say at the end of paragraph 51, in connection with the same thing:

Cessation of agitation which alarms and disturbs the minds of investors and inhibits saving, and recognition that prudently invested and well administered capital will be permitted to enjoy the rewards which it honestly earns.

Just exactly what do you mean by that?—A. In the first instance, unfortunately, anybody who lived on the prairie for any great number of years, as some of us did, will always have, I think, very definite and sad recollections of the effects on western Canada of the policy of extreme nationalism of countries which were our customers, particularly for agricultural products, when we could not sell our wheat and prices got down as low, I think, as 35 cents or 37 cents a bushel, in 1932. That had its effect not only on railway traffic primarily through the movement of farm products, but on general business, which is secondary to the sale of farm products. In so far as our internal policies are concerned, anything which tends to upset me—I have saved a few dollars which I want to set aside for my family or my wife when I finally pass out of the picture, and that money goes to work. If I have not a reasonable prospect that that money will be safeguarded and protected, but feel that in some way it may disappear, then that disturbs my mind; and as an average citizen I presume it disturbs the minds of people generally. Instead of putting that money into industry, and expecting to get a return, I do not know what I will do with it; perhaps I shall spend it or perhaps put it in a hole on the prairies as some people have done.

*By Mr. McKinnon:*

Q. In paragraph 8, Mr. Neal, you say:

It is also assumed that, under legitimate types of collective bargaining, labour will co-operate with those who furnish it with capital, so as to maintain full employment under free enterprise.

From that do I understand you to mean that the present organizations that are operating in your company would be considered legitimate?—A. Absolutely. We as a railway company, and I as a railway officer, have not anything—as I think probably you know personally—but the greatest regard for our labour organizations and the manner generally in which they are conducted. That arises out of a lifetime of experience, so far as the company is concerned an experience of nearly sixty years. We would expect that if the same measure of confidence, regard and co-operation is developed between capital, so-called,

and labour throughout the country, it will add substantially to the attainment of this object for which we are working.

*By Mr. Gray:*

Q. Would you tell me—I have just been given a map here—how many lines you absorbed of private enterprise air lines during the last five years?—A. I could if I studied them out. Maybe Mr. Wallace can answer the question off-hand.

Mr. WALLACE: A total of ten from 1939 to 1942.

Mr. GRAY: Would you tell us where they are. I should like to know not necessarily the name of the manager but the name of the company.

The CHAIRMAN: The number, you mean?

Mr. GRAY: No, just the names of the companies that have been absorbed by the C.P.R. and where they operate from.

Mr. WALLACE: The Yukon Southern from Edmonton and Vancouver to White Horse and Dawson; Canadian Airways—

Mr. GRAY: Who was that absorbed from?

Mr. WALLACE: Grant McConachie, General Manager.

The WITNESS: It should be understood that Grant McConachie, who pioneered and established this route, did not own it by himself. There were some shareholders.

Mr. GRAY: I am not interested in who pioneered it at all.

Mr. WALLACE: Ginger Coote and Canadian Airways, joint service, Vancouver to Victoria and northern Vancouver island. Mackenzie Air Service and Canadian Airways, joint service, Edmonton to Aklavik and Copper Mine; Prairie Airways, Regina, Moose Jaw, Saskatoon, Prince Albert and North Battleford; Arrow Airways in the northern portion of Manitoba; routes out of Winnipeg, largely duplicate or triplicate and operated by Canadian Airways, Starratt Transportation and Wings Limited; services in the middle of Quebec, Dominion Skyways, and Quebec Airways from Montreal to Quebec, and down to Labrador. That is all.

Mr. GRAY: Are there any private airways now that you have not absorbed?

Mr. WALLACE: The Maritime Central.

Mr. GRAY: That is the only one?

Mr. WALLACE: There are one or two small ones—Austen Airways.

Mr. GRAY: A little louder, please.

Mr. WALLACE: Austen Airways in Ontario.

Mr. GRAY: I am right now in saying that you have absorbed every private airway except three.

Mr. WALLACE: No. Wait a minute.

Mr. GRAY: Am I right in that?

Mr. WALLACE: I think that is right.

Mr. GRAY: Except three?

Mr. WALLACE: Roughly, three.

Mr. GRAY: Roughly or not roughly?

Mr. WALLACE: We are not interested in the others. You are asking for our information.

Mr. GRAY: Are there any private airways that you have not absorbed?

Mr. WALLACE: Yes.

Mr. GRAY: Let me put it that way.

Mr. WALLACE: Right.

Mr. GRAY: Name one which you have not absorbed.

Mr. WALLACE: Maritime Central, Austen, and I think it is Northern Airways—I am not sure—in British Columbia.

The WITNESS: That little company up in northern Saskatchewan, Mason and Campbell.

Mr. WALLACE: M. and C.

Mr. HILL: I wish you would absorb Maritime Airways and give us a little service.

The CHAIRMAN: Are there any further questions.

Mr. MACNICOL: Has the rate from Edmonton to Aklavik not been very largely increased this year over what it was a year ago?

Mr. WALLACE: There has been no change in rates. We are now under the same rate regulations as the railways, controlled by the Wartime Prices and Trade Board.

Mr. MACNICOL: I have been under the impression the rates a year ago from Edmonton to Aklavik were a lot less than they are now.

Mr. WALLACE: No. Our rates are exactly the same as when the companies were operating independently.

Mr. MACNICOL: You referred to Labrador.

The CHAIRMAN: Mr. MacNicol, I am sorry but the reporter cannot get half the questions and the answers.

Mr. ROSS (Calgary): Maybe if the witness would come to the front, it would be better.

The CHAIRMAN: Perhaps if the man who is answering the questions would come up here, we could all hear better. Mr. Wallace, would you come up to the table, please.

Mr. MACNICOL: I was under the impression that the rate from Edmonton to Aklavik last year—and I presume all these northern points—was much less than it is this year. I want to fly to Aklavik this year, and it seems to me that I have been asked a much higher rate than what was asked last year. Am I right or wrong?

Mr. WALLACE: Sorry, you are wrong.

Mr. MACNICOL: The rates are exactly the same?

Mr. WALLACE: Yes.

Mr. MACNICOL: You were running up there last year?

Mr. WALLACE: Yes.

Mr. MACNICOL: There were no other companies?

Mr. WALLACE: No. I have answered your letters, so I know about the inquiry.

Mr. MACNICOL: The rates are still too high for me.

The CHAIRMAN: I do not want to interrupt, Mr. MacNicol,—

Mr. MACNICOL: I wanted to find out about Labrador.

The CHAIRMAN: I do not want to interrupt, but time is short. I wonder if we could restrict our questions to things that relate to after the war and employment. The rates charged at the moment, after all, will not help us out in what we might do after the war.

Mr. MACNICOL: You are right, Mr. Chairman. Then I want to ask a few other questions.

The CHAIRMAN: I should like to have a few questions on railways and northern developments.

Mr. MACNICOL: May I ask my questions one after the other?

The CHAIRMAN: All right.

Mr. MACNICOL: I have four. On page 2 reference is made to the effect of droughts on agricultural activity in the west. The thought that struck me is whether or not the railway has any plans for any enlarged irrigation service in the west. I have a recollection of the C.P.R. having erected irrigation works in Alberta. What would you recommend in relation to extending irrigation works in Saskatchewan?

A. That is a matter which, of course as you know, is under consideration and has been reported upon by the committee under the chairmanship of Hon. Mr. Spence. The company, of course, pioneered irrigation in western Canada a good many years ago; and it is quite true that the company, after conference with the governmental authorities and with the farming community, turned over to the farmers, with a cash bonus what we call our eastern irrigation district. Irrigation is a long story. I have made some study of it myself, over the years; and I believe that, essentially, irrigation is not a wheat growing proposition. Experience has pretty well demonstrated that, with wheat at normal prices. But for mixed farming, for feed, the raising of cattle, and for other market crops—such as corn, tomatoes, sugar beets, and so forth, such as has been developed quite successfully, in southern Alberta, the Taber district, and Lethbridge northern—irrigation can make a real contribution and will help to stabilize agriculture, more especially in western Canada. The company at the present time has no program of extension of its irrigation system.

Q. On page 6 reference is made to immigration. Has the company any program in connection with immigration after the war?—A. No.

Q. If you have, would you be continuing the same scheme that was used at Tupper Creek, British Columbia? I looked that over and found it very satisfactory. I think that is a very good settlement.—A. Our position in connection with colonization and immigration is that we stand ready, with all our experience and our staff, to work with the government at any time they may define. Quite a successful settlement at Tupper Creek, which you referred to, was done in that way.

*By Hon. Mr. Mackenzie:*

Q. How much land has the C.P.R. now got of its own?—A. We do not own these lands at Tupper Creek.

Q. I know.—A. I would say, roughly speaking, that our land would comprise about 3,000,000 acres; and that is what we call the cull of the culls. It is the dregs of what we had in the beginning. A lot of it is not suitable for farm settlement.

*By Mr. MacKinnon:*

Q. In paragraphs 14 and 15 you state:

In fact, the present equipment is now being operated so close to the limit of its capacity that there is little margin with which to handle possible future traffic unless it proves possible for the government to permit the use of the labour and materials required for some immediate additions and those required from time to time.

If such permission can be granted there is no reason why the Canadian Pacific Railway will be unable to carry its full share of the great volume of traffic which must be moved for the duration of the struggle.

Those appear to me to be quite serious statements. Is there a question of the ability of the company to handle the traffic unless these concessions are granted?—A. The situation is that we have no surplus of passenger cars. Every car we have that has got wheels under it is running. We have no surplus of locomotives. We have not had a serviceable locomotive—and you will understand this term—tied up for considerably over a year. The percentage of locomotives under and waiting repairs, we have managed to get down from a normal of about 10 per cent to 7·8 or 8·7 per cent from month to month. With regard to freight cars, we are very short of certain classes of them, such as gondolas. As to box cars, we get by. We have on our lines at the present time a number of freight cars equivalent to approximately 100 per cent of our ownership. By that, I mean we have certain C.P.R. cars on foreign lines and we have a number of their cars on our lines which in effect equalizes. The trend of traffic generally is still slightly up. For the month of May I may say that the increase is only 7/1000ths of 1 per cent, so it is virtually equal. But we expect, based on information which we get from time to time and which is largely confidential, that we may be called upon to move considerable freight traffic this summer. If that moves in a certain way, we can take care of it without very much difficulty. If it were added to the traffic we already have and were moving in the direction of the preponderance of traffic, we would have some difficulty.

Q. It would seem imperative that some relief be given you in the form of new material.—A. We hope so. We have not been able to get the number of freight cars we asked for. I think it is generally known that as far as locomotives are concerned, the construction capacity of Canada is now being devoted to locomotives for war purposes abroad, so we cannot get any more locomotives for perhaps a year. Steel and lumber are the two big factors. We do manage to get by, working in close conjunction with the authorities. We know that they realize the situation and are most sympathetic. We get some help from time to time, and we manage to get by. But we are not getting locomotives, or freight cars particularly, as fast as we should. Consequently there is what you might call a backlog of unconsumed service steadily diminishing month by month; and if the war lasts four or five years, the policy would have to be changed if we are to continue to handle even the present volume of traffic. If the war is over, as we hope, in a year or a year and a half, we will be able to get by, getting along as we are.

Mr. HILL: I am very much impressed with paragraph 21 of the brief in which Mr. Neal states that the lack of an adequate national policy of regulation of highway traffic after the war, from 1918 to 1930, and even after that, was very detrimental to the economic welfare of Canada.

For eight years after 1918 I happened to be in a position where I had charge of the highways of the province of New Brunswick. During those eight years we met in many provincial conferences over this matter, and I

think it was the consensus of opinion of the engineers that lack of an adequate policy of highway transportation regulation cost the railways of this country millions of dollars and cost the provinces of this country many more millions of dollars, because we were building highways to carry such traffic as there was, up to say 5,000, 10,000 or 15,000 pounds; and immediately we got the highways up to where they would stand up to that traffic, which was supposed to be normal, and much in excess of what the traffic was before for which they were built, without any regulation policy the truck transport systems immediately said: "Now, these roads are in nice shape. We can put much heavier traffic on them." So they immediately jumped up to 10-ton traffic. Then your bridges had to be replaced. Your culverts had to be replaced. The foundations of the pavements had to be replaced for a traffic, we will say, of 15 tons per truck. Immediately we got to that stage, they jumped to 20-ton traffic and 25-ton traffic; and again your highways went down. I am certain that if a careful examination of these periods of construction was made, it would be found that it cost millions of dollars to the provinces of the country for repairing and rebuilding these highways, which were splendid highways for the traffic they were supposed to carry, due to the fact that there was not any adequate policy of regulation of traffic on those highways. At the same time the cost of the licensing and operating of the trucks was nothing like the cost of the destruction to the highway. The result was that they were able to operate very cheaply. They cut rates way down on freight, away below what it should have been, with the result that the railways lost millions of dollars. Then on top of that the provinces lost millions of dollars. That is one point upon which we should have something definite, a policy of regulating highway traffic. I do not believe that truck traffic should be operating on main lines between Montreal and Toronto in competition with the railways, because you can move a full carload of freight on the railway very efficiently and very much cheaper than it can be moved by truck, although the truck people will give cheaper rates; yet they certainly do not operate cheaper. They quote the cheap rates because they do not pay a tax adequate to the maintenance of the highway, with the result that the provinces take the loss. Something should be done and I think this committee should make strong recommendations that an adequate policy of highway transportation regulations be promulgated for the Dominion of Canada.

Mr. BENCE: Mr. Neal, I am interested in the attitude that your company and other companies are taking in matters which were referred to as private enterprise with respect to the conditions which were arrived at during the depression. In reading this brief I take it that your company does not feel that it personally has any responsibility with respect to matters arising out of depression and the unemployment that arose then. It feels at a time like that the government should step in and look after that backlog of unemployment, if you like.

I notice particularly in paragraph 11 you say, when the depression came along in the period 1929 to 1939, "this company...instituted a regime of rigid economy in maintenance expenditures." Thereby increasing unemployment not only on its own system but in matters related to those things which you refer to in paragraph 33. In paragraph 33 you say, "For example, the ordering of a locomotive stimulates employment in the production of iron ore, coal and other minerals, as well as other employment in the processing and assembling of materials." What I should like to know is this: in the light of your experience would the company adopt a different attitude, if another depression came on, to that which was adopted in the period 1929-1939 for the purpose of assuming some of the obligations which I think it should bear in connection with all matters related to a depression?

The WITNESS: Well, we would hope that we learned something out of the experience of the depression period as every other element that had to do with it did. However, we as a private company cannot spend money we do not have and cannot get. We have to be reasonably careful about how many debts we assume because we have to pay them back some day and pay interest on them. But I think it is a matter for private industry to co-operate very closely with the government in regard to it, to offset a recurrence of the depression and all of the ills that accompanied it. We did, if you will recollect, Mr. Bence, co-operate with the government as far as we could in that way to lighten the blow of depression in that last period.

Mr. BENCE: Would it have been better if it had been possible—I am not saying it was possible—to have continued to construct locomotives and the like rather than to allow the company to get into the condition that you discussed a while ago?

The WITNESS: Not locomotives necessarily, or rolling stock, but certain other work could be undertaken, and I would hope—we are talking now about trying to avoid another period of depression—despite all our efforts and the efforts of all citizens to avoid it, that if it should come about I hope we would be able to handle it a little differently from what we did before.

Mr. BENCE: What I was worried about was whether private enterprise would follow a policy of immediate retrenchment if there were any alarming signs on the horizon. I think that would be bad policy.

The WITNESS: I can only speak for our company. We handle traffic; if there is no traffic to handle we cannot move it and automatically some men do not work.

*By Mr. Hill:*

Q. If the government would allow you to pile up your excess profits during prosperous periods you could use those in bad times?—A. I should like Mr. Armstrong to be permitted to make some general remarks later, but may I say that we are governed in our expenditures by what we earn from month to month. If we can accumulate funds in a reasonable form for that purpose, as we are doing now, to spend during slack times that would be a much better policy than being governed by current conditions. We are setting aside certain funds under the heading of "additional maintenance" to cover what we cannot do now but must do as soon as we can.

Mr. P. C. ARMSTRONG: Gentlemen, economic principles, of course, are as Mr. Bence and Mr. Neal have put them. Quite obviously we did not need to have the depression we had. We had it because we all got so scared. Then we scared ourselves pretty badly, gentlemen, by some of the conversations that we indulged in during those days, by the revolutionary talk that was carried on with regard to capital. We were going to change everything, upset our whole society. In that way we alarmed business generally. Capitalists were not willing to take a chance. There is no reason for a depression occurring in this country that cannot be corrected, as far as I can see, because we have large quantities of national wealth, more than we can use. We could use a much larger population. We should have the manpower to use our natural resources. Why should we have a depression in Canada? The only way to prevent a depression in Canada is to refuse to have one. That requires two things, willingness of the worker to work for what he can earn at that time, not to set up some ideal standard he hopes for, but by every intelligent person saying, "I will work for what I can get." Willingness for capital to do the same thing and take the chance to make its contribution. Now, these are the basic principles involved.

With these principles engaged why should we have a depression in Canada that we cannot get out of? If we have one it is because we are getting alarmed unnecessarily. We got alarmed quite unnecessarily at that time and there is no necessity for us to be so timorous the next time.

We have suggested the government may periodically have to step in because we have got alarmed and the depression has got started. When that occurs the government may step in. The government can step in and spend money that private individuals cannot spend as private individuals. It will be the private individual's money. We are not suggesting that private enterprise is going to be able to dodge responsibility in regard to what the government may have to spend in providing a lot of the funds to the government to pay for it. The same applies to private enterprise. We cannot put it all out as expenses of the company, but we have to take it out through taxation; so that in the end you come back to the same thing. We must not have a depression and if a depression starts we must not allow men to become idle. If the government has to step in the government will have to step in. Let us hope the government won't have to step in, because that means we have reached a crisis when the government has to step in and hire men. That is the situation in a nutshell.

Mr. QUELCH: In 1928 we had general prosperity in this country. Private enterprise did not suddenly lose confidence. Is it not true the loss of confidence was largely due to the fact that credit was suddenly restricted to a very large extent? The amount of money in circulation was reduced from \$900,000,000 from 1929 to 1932. Was it not largely because of that? I heard a statement made to the effect that if there had been a central bank in Canada in 1930 credit would not have been restricted to the extent it was. I am not prepared to accept that as being the fact, but I do say it was largely due to the restriction of credit during those years that we had a depression.

The CHAIRMAN: I am going to ask Mr. Armstrong to wait before he answers the question. I do not mean to interrupt, but I know Mr. Quelch will understand when I say we have only about fifteen minutes left and Mr. Armstrong may want to make a speech on the question that was asked, but that would not tell us what employment is going to be created through the work of the C.P. Railway Company. I wonder if I may be permitted, in spite of the fact I am the chairman, to ask a question relative to the development of the great northwest country which means so much to Canada. In your opinion, would that development bring about the construction of what is called the coast outlet, a railroad connecting the north country, the Peace river country, the Alaska highway, and linking that up with the Pacific Great Eastern Company, linking that up with the Pacific coast?

Mr. NEAL: We have Mr. Macnabb here and he could answer that in a few words.

Mr. MACNABB: Mr. Chairman and gentlemen, we are dealing with about one-fifth of the area of the whole of Canada in this great northwest, and it is pertinent to agree that anything that is to be said would have to be said in a very general way. If you are going to serve the Peace river area particularly it will mean the expenditure of somewhere about \$85,000,000, and perhaps about 2,000 miles of railway. Are we going to do it? The natural resources are there, lots of them, coal and oil; the climate is all right. There are the lands; the people are not there. What about getting the people there? We will have the country, and undoubtedly the Canadian Pacific has the information that will enable it to say how the people who are in that area can best be served. Now, that is the problem very simply. Whether we get the people or not is the question. It is a matter of judgment as to whether Europe will let them come and as to whether or not we can absorb them and whether or not in fact the

immigration will take place. Personally I think it will, and the first thing to bear in mind is that people move to where they can be better off and I think they will realize they can be better off in Canada than anywhere.

The CHAIRMAN: How many people could be maintained there?

Mr. MACNABB: That, of course, depends entirely on the basis of your maintenance. If you put five people to a quarter-section, and that has been the basis that has been used, in one small block in the Peace river area there would be 60,000 people. But, we have coal and other resources that would bring in manufacturing which would greatly increase that percentage. There is no reason at all why a figure of 3,000,000 people in that north-western area should not be very simply obtainable, and these people could be contented and prosperous.

Mr. CASTLEDEN: In regard to that, we found in the days of the depression that Canadians in one part of Canada were impoverished and Canadians in other sections of the country had surpluses. We found Canadians impoverished in certain areas where they have a surplus of commodities. People have gone in there to build and they are doing the producing, they have got a surplus of commodities in one area and Canadians in another part of Canada are under-nourished because they could not get these very foods needed in their community. Now, one of the reasons given for that situation is the cost of transportation. I wonder if any of the gentlemen here would give us the basis upon which they set their rates for freight and express. I am thinking of the idea of exchanging wheat in Saskatchewan with the apples of the farmers in the Okanagan valley who want wheat. The farmers in Saskatchewan want apples and they cannot get them. They have carloads of wheat and no apples, while the farmers in the Okanagan valley have carloads of apples and no wheat. The same thing is true with regard to the fishermen on the coast and the people in eastern Canada. They require our wheat and cannot purchase it. I have been trying to solve the problem of getting it to these people. I have discussed it with the people who have to do with distribution. The people engaged in the job of distribution almost inevitably blame it on the costs of transportation, and in looking into these costs we find some figures that seem to us rather queer. The cost of transportation of goods from Hamilton to Vancouver was less than from Hamilton to Edmonton; and I should like to have some explanation or statement as to what the company bases its freight and express rates on.

Mr. NEAL: We have here the freight traffic manager.

The CHAIRMAN: I may appear this morning to be a little rough with the members. I do want the members to keep in mind the fact that we are dealing with post-war problems and conditions rather than conditions existing at the moment. Of course, your question really has to do with post-war problems as well.

Mr. CASTLEDEN: I do not want a recurrence of that.

Mr. MACNICOL: I think Mr. Macnabb should answer the previous question. I understood you to say the opening up of the Peace river area necessitated the building of about 2,000 miles of railway. That is, opening up from where the chairman referred to, from the end of steel over to Prince Rupert.

Mr. MACNABB: To completely serve that area you might start at Hudson Hope and work through as far as Hines Creek on the north and Dawson Creek in the south to take care of the country to the 60th parallel north.

Mr. MACNICOL: I figured about 500 miles.

Mr. MACNABB: It is just a question of how much branch line it would include and how much main line.

Mr. MacNICOL: I mean main line.

Mr. MACNABB: If you just have a main line—and of course there are at least four outlets that would be used, as you well know—

Mr. MacNICOL: I was thinking of connecting up both Dawson Creek and Hines Creek with Hazelton.

Mr. MACNABB: Yes; there are at least fifteen variants of how you are going to get out of there and if you took either the Peace pass, the Moncton pass or the Pine pass it depends on where you go to the coast, how many miles you would build. If you want a single outlet of course you can get out of there for in the neighbourhood of 500 miles. As a matter of fact you can get out for 161 plus 94 plus 115 plus 80, which is pretty close to your mileage. But then, you see, you would only have one single main line outlet, and you would need some branch lines to serve the north and you would need some branch lines to serve Finlay Forks and that vicinity too.

Mr. MacNICOL: What the chairman and I have in mind is this: there should be a railway outlet from the Peace river area both north and south of the river. If the railway were extended to Dawson Creek to somewhere near Hudson Hope—the river is very narrow there, about 150 feet or more in the canyon—you could connect up—

Mr. MACNABB: You cannot cross the Peace river at 150 feet.

Mr. MacNICOL: I say at the canyon.

Mr. MACNABB: Yes, I agree. You could get a bridge over the Peace river canyon, and it is not very long.

Mr. MacNICOL: Yes, that is so.

Mr. MACNABB: That is true.

Mr. MacNICOL: Then, with a branch from Dawson Creek joined up with an extension of the railway west of Hines Creek perhaps 500 miles would carry you through to connect with the railway to Prince Rupert near Hudson Hope. I think that is something the railway might consider later on and give us some information with regard to the possible extension of the railway from Hines Creek and from Dawson Creek via the Peace pass to the coast.

Mr. MACNABB: We have the information, Mr. Chairman.

Mr. Sissons: Might I be permitted to ask one question?

The CHAIRMAN: All right.

Mr. Sissons: Reference has been made to the Mackenzie river valley and the air development there. I was wondering, in view of that and the interest which the C.P. Air Lines has in the Mackenzie river valley and the present development at Fort Norman, about 150,000 pounds a year, has there been any consideration given to the building of a branch line or an extension from Grimshaw to Fort Vermilion?

Mr. MACNABB: Yes, we have surveyed from Grimshaw to Fort Vermilion and on to Providence and across to Norman. The question there again is the amount of traffic that is available if any extension were made. The information is available.

Mr. QUELCH: This brief largely defends private enterprise. Now in 1929 private enterprise had not lost confidence and yet suddenly investment in capital projects decreased. I suggest this was largely due to credit restriction.

Mr. P. C. ARMSTRONG: To be very brief, yes. Credit restriction all over the world—the world got into a tailspin of lack of confidence. Confidence is credit.

Mr. QUELCH: What destroyed confidence, the restriction of credit first of all?

Mr. P. C. ARMSTRONG: Possibly, and possibly threats of wars and possibly threats of revolutions.

Mr. QUELCH: There was not much threat of war in 1929?

Mr. P. C. ARMSTRONG: Yes, they were beginning to worry then. There was a great deal of tension in Europe, but I cannot go into the reasons why the thing broke down. I will say this, I do know if credit becomes shaky, if confidence in the future becomes shaky credit will be restricted, and it is quite possible the people who administer credit may be the first to lose confidence. I am not prepared to endorse any particular alteration in the credit machinery. That is not the point. Perhaps the credit machinery was perfect. Perhaps all it lacked was intelligent application, but we must not have any more of this tailspin of lack of confidence we went into at that time. Obviously if everybody gets frightened credit will be restricted. If credit is restricted we are going to have a collapse.

Mr. McDONALD: Would you say that at that time the credit machinery may have been overworked?

Mr. P. C. ARMSTRONG: Possibly. We have sometimes a little too much of a spree and after that we have a headache.

Mr. CASTLEDEN: Why should the threat of war destroy confidence in credit when war is the time when capital makes its greatest profit?

Mr. P. C. ARMSTRONG: Not in this war. In this war capital is not making its greatest profit. For example, we had only 3.9 per cent return on our investment against 4.1 in peace time.

Mr. CASTLEDEN: Would you say that was general?

Mr. P. C. ARMSTRONG: I would say generally speaking in Canada and Britain, but not so marked in the United States where taxation is now only beginning to be heavily felt. Capital is not making profits in this war. The great profits are being made by the workers.

Mr. CASTLEDEN: You would have a hard job convincing the worker of that.

Mr. P. C. ARMSTRONG: The statistics are there. I cannot alter them.

Mr. MACNICOL: I would like to give the C.P.R. a chance to tell us a little more about the northern airways and the possibilities of employment after the war in the expansion of those airways. A gentleman at my left a short time ago said the capacity of your largest plane in the north was 6,000 pounds?

The WITNESS: The maximum.

Mr. MACNICOL: I am sure that your planes will be greatly increased in capacity after the war and other air routes opened up in the north. Surely there should be a lot of employment there. If you increase the capacity of your planes would the runways and airfields not have to be enlarged if you operated them and if you do not operate the airfields would the government not have to increase the size of the airfields themselves? You might have to enlarge the airfields to operate say a twenty ton plane from Edmonton north. I always had a vision that Edmonton would be a great air centre if it had a chance to properly develop because it has all that vast country full of resources, and the development of that country north of it can be largely done by plane. That is certainly so in winter time. What can we do to assist you to develop the whole airway business in that vast north country centreing from Edmonton north?

Mr. CASTLEDEN: I had a question on freight rates.

The CHAIRMAN: Just one second, Mr. MacNicol. I told Mr. Castleden that we could have a brief answer on the question of freight rates. You do not mind if we make it brief, Mr. Castleden.

The WITNESS: I was going to say that when you get into a discussion of freight rates I am hardly competent, although I have been railroading for forty-one years, to discuss it because to me it is more or less of a mystery as an operating man. Mr. Jefferson is here and he could talk all day to-day and all day to-morrow trying to explain certain features of freight rates. The over-all fact is that Canada, as a matter of record, has the cheapest freight transportation in the world. The figures show that. For instance, from 1932 to 1942 the average return or revenue for the haulage of a ton of freight one mile is .882 cents in Canada and in the United States for the same period it was .970 cents. I may say if we had the same freight rate structure in Canada as they have in the United States we never would have any financial difficulties and we would have an awful lot of money to spend relieving unemployment. That is apart from the general over-all picture of transportation in Canada, and as a matter of company policy our aim is to provide transportation at the lowest possible cost we can and do business. There are big opportunities—and this is where I heartily agree with what was said with regard to highway transportation—there is a big opportunity in Canada to improve or lower the cost of transportation, the over-all cost, without in any way decreasing efficiency, in fact, increasing efficiency by establishing a closely integrated transportation system. We do not talk railway any more; we talk transportation. We have these four forms of transportation, and if we could get together with the provinces and the Dominion perhaps as a resumption of the consideration of the Rowell-Sirois report and work out a transport system in Canada, highways and railways each in their proper sphere, and airways and waterways, that would tend more than anything I know to place Canada in a strong competitive position in disposing of our export surpluses in competition with other countries producing the same things and which do not have the long transportation hauls and climatic conditions we have and do not have the standard of living we have, and which we hope will be much higher, particularly for the farmer.

The CHAIRMAN: I interrupted Mr. MacNicol to let Mr. Castleden's question be answered.

Mr. MACNICOL: I think there is a great field for your airways north of Edmonton.

The WITNESS: Not only north of Edmonton but throughout all of northern Canada.

Mr. MACNICOL: All these north-west lines centre at Edmonton?

The WITNESS: Just there they do. Of course, I had a letter from one of my old friends in Winnipeg the other day. He is a member of the government and he thinks that Winnipeg is going to be the centre.

Mr. MACNICOL: Winnipeg would be for northern Manitoba and west.

The WITNESS: Internationally, but that is a matter which, as I mentioned a little while ago, I feel rather handicapped in discussing at this time because of government policy. Forgetting the C.P.R. for a minute—it is hard for me to do it but occasionally I manage to—air development in all its aspects in northern Canada is bound to take place. That will mean, as you say, aircraft of higher capacity. The present maximum size air transports we use in North America are four-engined aircraft. We know that Germany has been using six-engined

aircraft and Mr. Kayser is working on plans for bigger than that. That necessarily means extended airfields and runways and additional routes in the north will mean additional ground and air services, also communication services. It is a big problem, and I think it will add substantially to the consumption of employment during the transition period after the war.

*By Mr. Matthews:*

Q. Mr. Neal, I want to ask you one question with regard to employment after the war. Have you any information at hand as to the number of your employees who are in uniform at the present time?—A. Yes, sir, we have altogether, I am very proud to say, about 16,000, and every man of those was told when he enlisted his job would be there for him when he comes back.

Q. That is just what I was getting at. I would like to ask now if you would care to give us any estimate as to how many of those you can re-establish without displacing those who are in your employ now? I have in mind the matter of employment after the war.—A. Yes. If we can maintain our present level of employment—that is in the stable forces, I might say, the forces whose employment is not employment directly dependent upon the moving of traffic—we will first of all take back all those men who come back that want to come back, those who are fit to come back. Based on our experience in the last war some of them will find occupations elsewhere. Some of them will undoubtedly remain in His Majesty's forces as they did before, and as to the number of those who would be displaced we have a lot of young people and a lot of women. We expect that most of the women, of course, will get married or resume house-keeping and that sort of thing. We have some very small boys and girls and we hope that they will go back to school within the next year or two. Then, if this program of works is taken care of we will be able to assimilate a great many of them in some capacity or another either directly in the company's forces or they will be furnished with employment through our purchases of equipment and supplies. It is impossible to give a figure, but generally that is the outlook.

*By Mr. McKinnon:*

Q. Mr. Neal, you mentioned the competition of motor vehicle transportation and the lack of an adequate national policy of regulation and policy of the provincial government. In addition to what you had to say a moment ago, have you any suggestions to offer further to what you offered a moment ago in regard to adoption of the Sirois Report?—A. What I had in mind was that might be a logical and opportune time for the discussions to be resumed on general matters between the federal government and the provinces. From the transportation standpoint we should have a central authority covering all highway transportation in Canada.

Q. The transport commission, as an example?—A. There is no reason why the transport commission should not exercise jurisdiction over all highway transport throughout the country, but the difficulty is the difference in interest between the provinces and the federal government and then the general matter of regulation of rates. Anybody knows who has read the Chevrier Commission Report, which is a most admirable report, that the conditions of highway transport as to rates of pay paid to the employees in highway transport do not begin to compare with those enjoyed by railway employees. That is another form of cost which was sub-standard and it was another form of uneconomical competition. We have no quarrel with highway transport. We say we are the wholesalers of transport and the trucks and buses are the retailers of transport.

The CHAIRMAN: Any further questions? The members of the committee are very anxious to get down to the railway committee room. Does anybody wish to ask any further questions before we adjourn? If not, I would thank Mr. Neil and the members of the railway corporation who have come here with him first for the brief and then for the manner in which you and your colleagues have conducted yourselves to-day. I am sorry that we had to shorten things up but I know that everybody will understand the presence of President Benes makes it almost necessary for most of the members, at least, to go down. Is there a motion to adjourn?

Mr. MACKENZIE (*Neepawa*): Is this the only day we are to have them?

The CHAIRMAN: Perhaps later on if the committee wish it we could have another session with Mr. Neal and the Canadian Pacific Railway Company.

Mr. BENCE: That is when these particular plans have been crystallized?

The CHAIRMAN: I think we could wait until there is a crystallization of these plans and then they can give us more information.

Mr. MCKINNON: I move we adjourn.

The committee adjourned at 11.55 a.m. to meet again at the call of the chair.











Government  
Publications

BINDING SECT. JAN 21 1960

Government  
Publication

